

Supreme Court, U.S.  
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APPENDIX

Volume I—pp. 1-548

In the Supreme Court of the United States

OCTOBER TERM, 1976

Nos. 75-909, 75-960, 75-1050 and 75-1055

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ENVIRONMENTAL PROTECTION AGENCY,

*Petitioner*

—v.—

EDMUND G. BROWN, GOVERNOR OF THE  
STATE OF CALIFORNIA, ET AL.,

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ON WRITS OF CERTIORARI TO THE UNITED STATES COURTS OF  
APPEALS FOR THE NINTH, FOURTH AND DISTRICT OF  
COLUMBIA CIRCUITS

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PETITIONS FOR CERTIORARI FILED DECEMBER 24, 1975,  
JANUARY 7, 1976 AND JANUARY 26, 1976  
CERTIORARI GRANTED JUNE 1, 1976

In the Supreme Court of the United States

OCTOBER TERM, 1976

Nos. 75-909, 75-960, 75-1050 and 75-1055

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ENVIRONMENTAL PROTECTION AGENCY,

*Petitioner*

—v.—

EDMUND G. BROWN, GOVERNOR OF THE  
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ON WRITS OF CERTIORARI TO THE UNITED STATES COURTS OF  
APPEALS FOR THE NINTH, FOURTH AND DISTRICT OF  
COLUMBIA CIRCUITS

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I N D E X

Volume I

	Page
Relevant Docket Entries of the Ninth Circuit .....	1
No. 73-3233 .....	1
No. 73-3268 .....	6
No. 73-3577 .....	8
Relevant Docket Entries of the Fourth Circuit .....	11
Relevant Docket Entries of the District of Columbia Circuit..	14
No. 74-1013 .....	14
No. 74-1582 .....	17
Proposed plan for Los Angeles AQCR, 38 Fed. Reg. 2194 .....	19
Approval of various state plans, 38 Fed. Reg. 16550 .....	48
Revised proposed plan for L.A. AQCR, 38 Fed. Reg. 17683 ..	135
Proposed plan for Arizona, 38 Fed. Reg. 18942 .....	158
Proposed plan for California other than Los Angeles, 38 Fed. Reg. 18948 .....	183

**INDEX**

	<b>Page</b>
Proposed plan for District of Columbia portion of National Capital Interstate Region, 38 Fed. Reg. 20758 .....	241
Proposed plan for Baltimore, Maryland, 38 Fed. Reg. 20769..	279
Proposed plan for Maryland portion of National Capital Interstate Region, 38 Fed. Reg. 20779 .....	319
Proposed plan for Virginia portion of National Capital Interstate Region, 38 Fed. Reg. 20789 .....	365
General Preamble to Transportation Control Plans, 38 Fed. Reg. 30626 .....	406
California Transportation Control Plan, 38 Fed. Reg. 31232..	440
 <b>Volume II</b>	
Arizona Transportation Control Plan, 38 Fed. Reg. 33368....	549
National Capital Region Transportation Control Plan, 38 Fed. Reg. 33702 .....	589
Baltimore, Maryland, Transportation Control Plan, 38 Fed. Reg. 34240 .....	715
Correction to California TCP, 38 Fed. Reg. 34464 .....	790
District of Columbia Self-Government and Governmental Reorganization Act, P.L. 93-198, 87 Stat. 774 .....	793
Additions and revisions to plan submitted by Virginia for Virginia portion of National Capital Interstate Region, July 9, 1973 (excerpts), Record in Nos. 75-1050, 75-1055 at pp. 4887-5306 .....	901
Testimony of Cleatus Barnett, Public Hearings on Transportation Control Plans for the National Capital Area, September 6, 1973 (excerpts), Record Doc. No. 20 in Nos. 75-1050, 75-1055 at pp. 826-842 .....	912
Washington Metropolitan Area Transit Authority Compact, P.L. 89-774, 80 Stat. 1324 .....	919
Amendments to W.M.A.T.A.C., P.L. 92-349, 86 Stat. 464 .....	971
Orders granting certiorari filed June 1, 1976 .....	978

UNITED STATES COURT OF APPEALS  
FOR THE NINTH DISTRICT

ADMIN PETN TO REVIEW

CITY OF SAN FRANCISCO UPTOWN PARKING CORPORATION  
A CORPORATION; CITY OF SAN FRANCISCO PORTSMOUTH  
PLAZA PARKING CORPORATION, A CORPORATION; CITY  
OF SAN FRANCISCO CIVIC PLAZA PARKING CORPORA-  
TION; AND CITY OF SAN FRANCISCO SOCIAL SERVICES  
CORPORATION, PETITIONERS

vs.

ENVIRONMENTAL PROTECTION AGENCY, RESPONDENT

DATE	FILINGS-PROCEEDINGS
1973	Nov. 27 FILED ORIG. & 7 COPIES OF A PETITION TO REVIEW AN ORDER OF THE EPA. \$50
1974	Mar. 11 FILED ORIG. & 3 COPIES OF RESPONDENTS MOTION TO CONSOLIDATE APPEAL WITH 73-3250- 59, 73-3261-3307, 73-3309, 73-3315, 73-3317-19, 73-3322, 73-3339-44, 73-3352, 73-3355-57, 73-3359, 73-3366, 72- 3368-77, 73-3379, 73-3381-3391, 73-3396-3425, 73-3430-32, 73-3445-52, 73-3479, 73-3428, 73-3453-65, 73-3467-3478, 73-3480-98, 73-3501-08, 73-3510-15, 73-3517-18, 73-3520, 73-3522, 73-3524-28, 73-3530 to "C" (Z)
	Apr. 12 Filed order (C & M) consolidating appeal #'s 73- 3233; 73-3250-59; 61-99; 73-3300-09; 15; 17-19; 22; 39- 44; 52; 55-57; 59; 66; 68-77; 79, 81-91; 96-73-3425; 28; 30-32; 45-65; 67-98; 73-3501-08; 10-15; 17-18; 20; 22; 24-28; 30. Further ordered the certified index to the record previously filed in No. 73-3238 shall be treated as the index to the record in these cases. Respondent will serve each petitioner with a copy of the certified index.

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DATE	FILINGS-PROCEEDINGS
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1974

Concurrent with filing the record with the clerk of this Court, Respondent will serve on each Petitioner and file with the court a proposed schedule for briefing. Petitioners may file objections to the proposed briefing schedule within 10 days of the date it is filed, but unless the court order otherwise, the schedule filed by Respondent will be effective. Petitioners may file joint briefs without further order of the court. cl (C and M)

Aug. 14 Filed original supplemental certified index to the record in the Calif Transportation Control Plan which was inadvertently omitted from the July 11, 1974 letter.  
-ra-

Aug. 19 Filed, in 73-3420, order (C & M) the briefing schedule in the above-entitled matter is established as follows: petitioners' brief due September 16, 1974, respondent's brief due October 16, 1974, petitioners' reply brief due October 31, 1974; further ordered, the appeal in 73-3420 is dismissed and leave to permit mailing of service copies with certification of mailing in lieu of a list of addresses is granted. The motion for a 60 day stay by Texaco, Inc. is denied. jr

Sept. 16 Filed 25 copies petitioner's briefs. (Calif. Business Properties Assn, Los Angeles County Federation of Labor, et al.) (Sept. 13, 1974) tj

Sept. 16 Filed 25 copies petitioner's briefs. (County of San Bernardino) (Sept. 13, 1974) tj

Sept. 20 Filed, as of Sept. 18, in 73-3343, 25 copies Aplt's briefs. (Pacific Legal Foundation) (Sept. 16, 1974) tj

Oct. 7 Filed order (Hufstedler & Wallace) the filing of opening briefs by petitioners is stayed until December 1, 1974; further ordered, the effective date for enforcement of the Parking Management Control Regulations is stayed to and including March 15, 1975, all other opening briefs of petitioners dealing with remaining portions of the

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DATE	FILINGS-PROCEEDINGS
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1974

California Transportation Control Plan shall be filed on or before October 4, 1974. jr

Oct. 21 Filed, as of Oct. 3, 1974, in 73-3263 25 Aplt's briefs (City of San Jose) (Oct. 3, 1974) tj

Oct. 21 Filed as of Oct. 7, 1974, in 73-3259, 25 Aplt's briefs (City of Los Angeles) (Oct. 4, 1974) tj

Oct. 21 Filed, as of 10/16/74, order (Br & W) directing the clerk to file the statements in lieu of briefs of the petitioners in 73-3513, 73-3370, 73-3422, 73-3382, 73-3372 & 7303282. jr

Dec. 23 Filed order (Browning & Choy) upon due consideration of the motions of the parties, petitioners' opening briefs dealing with the Parking Management Control Regulations shall be due 30 days after respondent files the Supplemental Certified Record with the Court; the Clerk will so notify the parties when that record is filed; as to the remaining portions of the California Transportation Control Plan, respondent is hereby granted an extension to and including January 6, 1975 to file its brief; petitioners' reply briefs shall be filed on or before January 27, 1975; p \* \*

1975

Jan. 16 Filed order (C, S) upon due consideration, the motion for stay of the effective dates of the California Transportation Control Plan is hereby denied. The respondent is granted leave to file an oversized brief of 88 pages, plus appendix, in typewritten form. However, respondent shall forthwith properly serve a copy of such brief on all petitioners. Petitioners are hereby granted an extension to and including Feb. 3, 1975 to file their reply briefs. sj

Jan. 20 FILED 25 RESPONDENTS BRIEFS (1/17/75). cl

Feb. 3 FILED 25 PETITIONERS (CITY OF LOS ANGELES, ET AL) BRIEFS (IN 73-3259) (1/31/75). cl

DATE	FILINGS-PROCEEDINGS
1975	
Feb. 19	FILED 25 REPLY BRIEFS FOR STATE OF CALIFORNIA (2/18/75) ec
Feb. 21	FILED 25 PETITIONER'S REPLY BRIEFS (Pacific Legal Foundation) 1/31/75 ec
Feb. 27	Filed 25 Petitioner's Reply Briefs (County of S. Bernardino) 2/25/75) ec
Feb. 27	Filed, in 73-3406, order (K & E) the filing of opening briefs as to the issue of gasoline vapor recovery systems only is deferred until 40 days after the respondent files a supplemental record on appeal which includes its further and final publications as to the above described issue. jr
Mar. 6	FILED 25 REPLY BRIEFS OF CALIFORNIA BUSINESS PROPERTIES. (2/14/75) cs
Mar. 19	Filed order (K D) re: petitions which deal solely with review of the Parking Management Regulations of Calif Transportation Control Plan should be dismissed due to indefinite suspension of these regulations by respdt. Such dismissal would be without prejudice to filing of new pet if & when amended regulations are filed. All petitions in which brief, joint brief or statement in lieu of brief has not been filed in behalf of petr are dismissed subject to reconsideration in each individual case if objection is filed within 14 days from filing date of order. Further ordered that this order does not affect order of Feb. 27th granting stay of briefing schedule as to issue of gasoline vapor recovery systems. rh
May 9	Filed order (Koelsch & Duniway) upon due consideration of the objections, petitions for rehearings and requests for clarification rec'd in response to this Court's order of March 19, 1975, the Court enters the following order: 1) the order of March 19, 1975 is hereby vacated and annulled: 2) all further action in these cases dealing solely with the review of Parking Management Regula-

DATE	FILINGS-PROCEEDINGS
1975	
	tions of the California Transportation Control Plan are stayed until August 1, 1975 or until further order of this Court, which ever occurs first; 3) should Respondent EPA lift the indefinite suspension of the Parking Management Regulations or promulgate proposed final regulations designed to supersede said regulations, it is directed to inform this Court of such lifting of the suspension or promulgation within 10 days thereafter; 4) in the event neither the lifting of the suspension nor the promulgation of superseding regulations has occurred prior to July 15, 1975, the EPA is directed to inform this Court not later than July 25, 1975 of the then prevailing policy of the Agency with respect to such lifting of the suspension of promulgation and with respect to all other matters germane to the issues to which the Parking Management Regulations pertain. All cases consolidated by this Court's order of April 7, 1974 shall hereafter use case number 73-3268 as the consolidated case number. jr

UNITED STATES COURT OF APPEALS  
FOR THE NINTH DISTRICT

Consolidated w/ 73-3233 ect.

ADMIN PETITION TO REVIEW  
FROM EPA REGION 9

CALIFORNIA BUSINESS PROPERTIES ASSOCIATION, BROADWAY-HALE STORES, INC., BUFFUMS, FEDERATED DEPARTMENT STORES, INC., J. C. PENNEY CO. INC., MONTGOMERY WARD & CO., INC., MAY DEPARTMENT, R. H. MACY & CO., SEARS, ROEBUCK & CO., THE WEST-CHESTER ASSOCIATION, ANITA ASSOC., BOISE CASCADE HOME & LAND CORP., COLDWELL, BANKER & CO., ERNEST W. HAHN, INC., HARRY NEWMAN PROPERTIES, LOS ANGELES TURF CLUB, OCCIDENTAL LIFE INSURANCE CO. OF CALIFORNIA, SANTA ANITA CONSOLIDATED, INC. AND THE LOS ANGELES ATHLETIC CLUB, PETITIONERS

vs.

ENVIRONMENTAL PROTECTION AGENCY, RESPONDENT

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DATE                    FILINGS-PROCEEDINGS

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1975

Jun. 1 Filed Order (Chambers) "a hearing on the Constitutional issues presented in the briefs will be heard on July 10, 1975 at 1:30 p.m. in the U.S. Courthouse in San Francisco; further Ordered the parties are requested to confer forthwith with the object of submitting to the Court of proposed expedited schedule for the briefing remaining to be done." (Cases to be heard: 73-3262-63; 65; 69-70; 82; 84; 97; 3302; 09; 15; 17; 42; 52; 55-56; 85; 3400; 13-14; 25; 45; 63; 3515; 17-18; 3296; 68; 3462; 83-84; 3278-74; 3505; 3305-06 & 3343.) cs

DATE	FILINGS-PROCEEDINGS
Jun. 19	Filed, in 73-3262, Order (Sneed) at the hearing set for 1:30 p.m. on July 10, 1975 argument on behalf of the parties shall be limited as follows: State of Calif. 30 minutes; Penney, So. Calif Gas, Sepulveda Properties & Security Pacific Nat'l Bank—15 minutes; Pacific Legal Foundation 10 minutes & U.S. EPA 30 further Ordered add'l briefs pertaining to the matters to be heard 7/10/75 not in excess of 25 pages desired to be filed, must be filed no later than July 1, 1975. cs.
Jun. 27	Filed 25 Appellants Briefs (6/25/75) -dmf- To panel
July 1	Filed 25 Petitioner's Supp. Briefs on Constitutional Issues. (Pac. Legal Four (panel) ec
July 3	Filed 25 Supplemental Briefs (7/1/75) -dmf- To panel
July 7	Recv'd 25 briefs of the EPA in response to brief of J.C. Penney Co. (7/2) (panel) cs
July 10	CAUSE ARGUED & SUBMITTED ON CONSTITUTIONAL QUESTIONS ONLY TO WRIGHT, KILKENNY, SNEED. fm
July 21	Rec'd respondent's letter of July 18, 1975 re: response to Judge Sneed's request at oral argument, etc. (panel) ec
July 30	Rec'd from David J. Toomey letter of July 28, 1975 re response to respondent's letter of July 18. (panel) ec
Aug. 15	FILED ORDER (WRIGHT, KILKENNY & SNEED) DISMISSED WITHOUT PREJUDICE.
Aug. 15	Filed & Entered Judgment. jr
Sep. 9	Issued judgment.

UNITED STATES COURT OF APPEALS  
FOR THE NINTH DISTRICT

Consolidated With:

73-3588, 74-1001, 74-1002, 74-1013, 74-1009

PETITION TO REVIEW  
EPA REGION 9

STATE OF ARIZONA, PETITIONER

v.

ENVIRONMENTAL PROTECTION AGENCY, RESPONDENT

DATE	FILINGS-PROCEEDINGS
1973	
Dec. 20	FILED ORIG. & 7 COPIES OF A PETITION TO REVIEW AN ORDER OF THE ENVIRONMENTAL PROTECTION AGENCY. \$50
1974	
Feb. 15	Filed 4 certified copies of index of the record in lieu of record. cs
Feb. 25	Filed orig & 3 respondent's motion to consolidate appeal with appeals nos. 73-3588, 74-1001, 74-1002, 74-1009 & 74-1013. (to O'Fallon) cs
Mar. 22	Filed order (E, G) consolidating 73-3577 with 73-3588, 74-1001, 74-1002, 74-1009, 74-1013. ty
Apr. 8	FILED CERTIFIED EPA HEARING TRANSCRIPTS AND EXHIBIT VOLUMES IN THIRTEEN VOLUMES, ORIG. ONLY: VOL. I, II, & III, RECORD OF EPA HEARNG ON PROPOSED TRANSPORTATION CONTROL PLAN FOR THE PHOENIX-TUCSON INTRASTATE AIR QUALITY CONTROL REGION, SEPTEMBER 10-11, 1973, TUCSON, ARIZONA; VOL. IV, V, & VI, EXHIBITS OF LETTERS AND STATE-

DATE	FILINGS-PROCEEDINGS
1974	
	MENTS; VOL. VII, VIII, & IX, RECORD OF EPA HEARINGS ON PROPOSED TRANSPORTATION CONTROL PLAN FOR THE PHOENIX-TUCSON INTRASTATE AIR QUALITY CONTROL REGION, SEPTEMBER 12-13, 1973, PHOENIX, ARIZONA; VOL. X, XI, XII, & XIII, EXHIBIT OF LETTERS AND STATEMENTS. One Box of Exhibits filed in Room 219.
Apr. 9	Appellant's brief due May 19, 1974. -jeh-
June 7	Filed, 25 appellant's briefs (for J.C. Penney Co., Inc. #73-3588) 6/5/75 gb
June 11	FILED 25 APPELLANTS BRIEFS (6/10/74)
June 17	FILED 25 APPELLANTS BRIEFS (6/14/74)
Aug. 20	Filed, as of Aug. 16, 1974, 25 copies Aple's briefs, (EPA), (Aug. 13, 1974) tj
Aug. 23	Filed order (C) granting respondents leave to file supp'l certified index to record effective 7 days after date (8/22/74) if no objection filed meanwhile. jr
Sep. 16	Filed 25 copies petitioner's (Broadway-Hale Stores, Safeway Stores, Sears, Roebuck, Homart Development, Proper Environment Planning) reply briefs. (Sep. 13, 1974) tj
Sep. 20	Filed Order (Merrill & Wright) granting respondent leave to file the supplemental certified index with the exception of document #52 "Evaluation Report for the State of Arizona" which shall be stricken; * * *
Oct. 1	FILED SEPT 20, 1974 CERT SUPPLEMENTAL RECORD ON APPEAL: (CERTIFIED INDEX AND EXHIBITS DOCUMENTS #53, 54, 55, & 56) FILED IN LPS -ra-
Oct. 3	Rec'd. 25 copies of Petitioner's Reply Brief (State Of Arizona) -mid-

DATE	FILINGS-PROCEEDINGS
1974	
	Dec. 16 FILED AS OF OCT 15, 1974, 25 PETITIONERS REPLY BRIEFS (10/1/74). cl
1975	
	Jan. 9 Filed order (C&S) petitioners' motion for expedited hearing, the Clerk is directed to calendar the case for oral argument to be held during the week of March 3, 1975 to March 7, 1975 in Los Angeles. jr
	Mar. 4 ARGUED BEFORE (E, T, S, CJJ); SUBMISSION DEFERRED UNTIL FURTHER ORDER OF COURT.
	ty
Sept. 8	ORDERED OPINION (SNEED) FILED & JUDG TO BE FILED & ENTD
Sept. 8	Filed opinion—granted in part and dismissed without prejudice in part.
Sept. 8	Filed & Entered Judgment. jr

**GENERAL DOCKET**  
**UNITED STATES COURT OF APPEALS**  
**FOR THE FOURTH CIRCUIT**

Case No. 74-1007

ON PETITION FOR REVIEW OF AN ORDER OF  
THE ENVIRONMENTAL PROTECTION AGENCY  
(See Nos. 74-1011, 74-1026, 74-1037, 74-1052, 74-1062,  
74-1063 and 74-1064)

STATE OF MARYLAND, PETITIONER  
v.

RUSSELL E. TRAIN, ADMINISTRATOR, AND  
ENVIRONMENTAL PROTECTION AGENCY, RESPONDENTS  
DISTRICT OF COLUMBIA, a municipal corp., INTERVENOR  
WASHINGTON AREA BICYCLIST ASSOC. INC., ET AL.,  
INTERVENOR

For Review of an Order of the  
Administrator of the EPA

December 6, 1973

DATE	FILINGS-PROCEEDINGS
1/3/74	Petition for review of an order of the Administrator of the Environmental Protection Agency filed and cause docketed.
1/21/74	Motion of the District of Columbia, a municipal corporation, for leave to intervene as a petitioner under Rule 15(d) F.R.A.P. filed.
2/19/74	Order granting Washington Area Bicyclist Association Inc., et al leave to intervene and the District of Columbia, etc., leave to intervene filed.

DATE	FILINGS-PROCEEDINGS
2/25/74	Respondent's motion to consolidate appeals for briefing and for filing of certified record filed; motion granted.
2/25/74	Certified list filed; brief dates set.
6/4/74	Order transferring Washington portion of this case to the D.C. Court of Appeals filed. (vsl)
8/19/74	Five (5) copies of the petitioner's brief filed. tf
8/19/74	Four (4) copies of petitioner's brief (Adcor, Assoc Dry Goods, J.C. Penney) Filed, j/w 74-1011, 1026, 1037, 1052, 1062-63. -tf
8/22/74	Twenty-five (25) copies of the petitioner's brief for (Adcor Realty, Assoc. Dry Goods and J. C. Penney) Jt. w/ 74-1011, 26, 37, 52, 62, 63, and 74-1064 filed. (wtc)
11/4/74	Order denying motion to delay consideration of review cases; motion of certain petitioners to expedite review of cases is granted; the alternative motion of certain of the petitioners to stay the Parking Management Regulations is not passed upon; and the order is without prejudice for the parties to renew the motions before a panel of this court filed. (foc)
11/20/74	Four (4) copies of the supplemental Narrative of petitioner filed Jt. w/74-1011, 1026, 1037, 1052, 1062, 1063, & 74-1064. (whf)
11/20/74	Four (4) copies of the supplemental brief for petitioner May Co. filed Jt. w/74-1011, 1026, 1037, 1052, 1062, 1063, & 74-1064. (whf)
11/21/74	Twenty-five (25) copies of the supplemental brief of petitioners J. C. Penney & M. Ward filed Jt. w/74-1011, 1026, 1052, 1062, 1063, & 1064. (whf)
11/29/74	Four (4) copies of the respondent's brief received. (wtc)
12/12/74	Ten (10) copies of the respondent (St. of Md.) brief filed. (whf)

DATE	FILINGS—PROCEEDINGS
12/13/74	Ten (10) copies of the joint appendix filed Jt. w/74-1011, 1026, 1037, 1052, 1062, 1063, 1064. (whf)
12/16/74	Twenty-five (25) copies of the petitioner's (May Co.) brief filed Jt. w/74-1007, 1011, 1026, 1037, 1052, 1062, 1063, & 74-1064. (whf)
12/16/74	Twenty-five (25) copies of the petitioner's (may Co.) supplemental brief filed. Jt. w/74-1011, etc. (whf)
12/17/74	Cause argued before Widener, Circuit Judge, MacKenzie and Warriner, District Judges, and submitted. (wu)
12/18/74	Record of EPA for the Baltimore Transportation Control Plan, in ten volumes (contained in two boxes) joint with 74-1011, 26, 37, 52, 62, 63 and 64. transmitted to Judge Widener along with tape. (wu)
9/19/75	Opinion (HEW) filed; copy sent to counsel of record and to EPA in Washington. (vsl)
9/19/75	Decree filed; order of EPA enforced in part and reversed in part. (vsl)
1/15/76	Notice evidencing the filing petition for writ of certiorari in the Supreme Court January 7, 1976 filed. (No. 75-960) (jhl)

## GENERAL DOCKET

UNITED STATES COURT OF APPEALS  
FOR THE DISTRICT OF COLUMBIA CIRCUIT

74-1013

PETITION FOR REVIEW OF AN ORDER OF THE  
ENVIRONMENTAL PROTECTION AGENCY

DISTRICT OF COLUMBIA, ETC., PETITIONER

*v.*

RUSSELL E. TRAIN, Administrator,  
Environmental Protection Agency  
and

ENVIRONMENTAL PROTECTION AGENCY, ETC., RESPONDENTS

WASHINGTON AREA BICYCLIST ASSOC., INC., METROPOLI-  
TAN WASHINGTON COALITION FOR CLEAN AIR, INC.,  
BREATHERS FOR THE REDUCTION OF ATMOSPHERIC HAZ-  
ARDS TO THE ENVIRONMENT, INTERVENORS

## DATE            FILINGS—PROCEEDINGS

- (G) 1-3-74 4-Petitioner's petition for review of an order of the Environmental Protection Agency (m-3)
- (L) 2-1-74 4-Motion of Washington Area Bicyclist Association, Inc. et al for leave to intervene (m-31)
- (B) 2-13-74 Clerk's order granting motion by Washington Area Bicyclist Assoc., Inc., and the Metropolitan Washington Coalition for Clean Air, Inc., and Breathers for the Reduction of Atmospheric Hazards to the Environment for leave to intervene; \* \*

## DATE            FILINGS—PROCEEDINGS

- (L) 2-13-74 4-Respondent's motion to consolidate with Nos. 73-2234, 73-2238, 74-1015, 74-1016, 74-1018 and 74-1030 and to file a single record (m-13)
- (B) 3-4-74 Clerk's order that nos. 73-2234, 73-2238, 74-1013, 74-1015, 74-1018 and 74-1016 and 74-1030 are consolidated for all purposes; further ordered that Clerk is directed to file certified index to record and it shall be deemed filed in all of the above cases
- (B) 12-30-74 Per Curiam order sua sponte, that nos. 74-1013, 74-1575, 74-1577, 74-1579, 74-1580, 74-1581 and 74-1582 are consolidated for consideration on the merits the time filing petitioner's brief is extended to February 11th; Respondent's brief shall be filed 30 days from the date of filing petitioner's brief and petitioner's reply brief and the joint appendix shall be filed 15 days thereafter; the date of oral argument of these cases shall be established by a future order of the Court; MacKinnon and Robb, CJ (PERTAINS ONLY TO NOS. 74-1013, 74-1575, 74-1577, 74-1579, 74-1580, 74-1581 and 74-1582)
- (G) 2-7-75 15-Petitioner's brief (m-7)
- (B) 3-10-75 7-Brief for Intervenors Washington Area Bicyclist Assoc., Inc., et al., (m-10)
- (K) 3-24-75 7-Respondent's Brief (m-24)
- (R) 4-8-75 Per Curiam order that the motion to extend time to file petitioner's reply brief granted and the time for filing petitioners' reply briefs and the joint appendix in these consolidated cases is extended to April 25th; sua sponte, that oral argument in the consolidated cases will be heard on May 12, 1975 at 10:00 A.M. the Courtroom of the U.S. Court of Appeals for the District of Columbia Circuit Fifth U.S. Courthouse; MacKinnon and Robb, CJ; and Christensen, U.S. Sr. District Judge for the District of Utah, sitting by designation
- (G) 4-25-75 7-Petitioner's reply brief (m-25)

DATE	FILINGS—PROCEEDINGS
(K)5-2-75	15-Petitioner's Reply Brief (m-2)
(K)5-2-75	15-Intervenors' Brief (m-2)
(K)5-2-75	15-Respondents' Brief (m-2)
(K)5-2-75	7-Joint Appendix (m-2)
(R)5-12-75	Argued before MacKinnon and Robb, CJ and A. Sherman Christensen, Sr. U.S. District Judge for the District of Utah, sitting by designation
(G)9-8-75	4-Respondents' motion for leave to file a supplemental brief (m-8)
(R)9-25-75	Per Curiam order that respondent's motion for leave to file supplemental brief is denied; MacKinnon and Robb, CJ; and Christensen, U.S. Sr. District Judge for the District of Utah, sitting by designation.
10-28-75	Opinion for the Court filed by Circuit Judge MacKinnon.
10-28-75	Judgment affirming in part and remanding case for further proceedings. (n)
11-19-75	Certified copy of opinion and judgment issued to the EPA.
(G)2-3-76	Notice of filing petition for certiorari in S.C. No. 75-1055 on January 26, 1976.

GENERAL DOCKET	
UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT	
[TRANSFERRED FROM 4TH CIRCUIT]	
	74-1582
PETITION FOR REVIEW OF AN ORDER OF THE ENVIRONMENTAL PROTECTION AGENCY	
COMMONWEALTH OF VIRGINIA, EX REL. THE STATE AIR POLLUTION CONTROL BOARD, PETITIONER	
v.	
RUSSELL E. TRAIN, ADMINISTRATOR AND ENVIRONMENTAL PROTECTION AGENCY, RESPONDENT	
DATE	FILINGS—PROCEEDINGS
(L)6-7-74	Proceedings transferred from the United States Court of Appeals for the Fourth Circuit (n-3)
(B)12-30-74	Per Curiam order, <i>sua sponte</i> , that nos. 74-1013, 74-1575, 74-1577, 74-1579, 74-1580, 74-1581 and 74-1582 are consolidated for consideration on the merits: time for filing petitioner's brief is extended to February 11th, Respondent's brief shall be filed 30 days from the date of filing petitioner's brief and petitioner's reply brief and joint appendix shall be filed 15 days thereafter: date of oral argument shall be established by a future order of the Court: MacKinnon and Robb, CJ
(G)2-6-75	15-Petitioner's brief (m-6)
(G)2-6-75	10-Appendix (m-6)
(K)3-24-75	7-Respondent's Brief (m-24)
(G)4-25-75	15-Petitioner's reply brief (m-25)

DATE	FILINGS—PROCEEDINGS
(K)5-2-75	15-Petitioner's Brief (m-2)
(K)5-2-75	15-Petitioner's Reply Brief (m-2)
(K)5-2-75	15-Respondents' Brief (m-2)
(K)5-2-75	7-Joint Appendix (m-2)
(R)5-12-75	Argued before MacKinnon and Robb, CJ and A. Sherman Christensen, Sr. U.S. District Judge for the District of Utah, sitting by designation
10-28-75	Opinion for the Court filed by Circuit Judge MacKinnon.
10-28-75	Judgment affirming in part and remanding for further proceedings. (n)
(G)2-3-76	Notice of filing petition for certiorari in S.C. No. 75-1055 on January 26, 1976
(G)2-3-76	Notice of filing petition for certiorari in S.C. No. 75-1050 on January 26, 1976.

## ENVIRONMENTAL PROTECTION AGENCY

[40 CFR Part 52]

### CALIFORNIA AIR QUALITY STANDARDS

#### Approval and Promulgation of Implementation Plans

This notice of proposed rule making sets forth a transportation control plan for the Metropolitan Los Angeles Intrastate Air Quality Control Region (hereinafter, Los Angeles AQCR or South Coast Air Basin), as required by order of the U.S. District Court for the Central District of California, November 16, 1972. This proposal results from the failure of the State of California to submit an acceptable implementation plan for the attainment and maintenance of the National Primary Ambient Air Quality Standard for photochemical oxidants.

#### BACKGROUND

Under the Clean Air Act Amendments of 1970 (hereinafter referred to as the Act), enacted December 31, 1970 (Public Law No. 91-604, 42 U.S.C. 1857 et seq.), Congress required the States to prepare plans to implement the National Ambient Air Quality Standards promulgated on the basis of health and public welfare effects by EPA.

EPA promulgated the ambient standards on April 30, 1971. Pursuant to the statutory timetable, each State had 9 months in which to develop, adopt, and submit detailed plans for implementation of the ambient standards. The State plans submitted on January 31, 1972, were to contain emission limitations and such other measures as necessary to insure attainment and maintenance of the ambient standards, including transportation controls if necessary. (Clean Air Act, section 110 (a) (2) (B).)

In most areas of the country the ambient standards could be met by the imposition of emission controls on stationary sources of pollution. EPA and the States had

adequate knowledge of and experience with these types of controls. Their feasibility, effectiveness, and impact upon the sources as well as the community could be evaluated with reasonable accuracy. In other areas of the country, mobile sources were a predominant source of pollution, but the ambient standards would be met as a result of the decrease in pollution due to increasingly stringent Federal emission standards for new cars required by other sections of the Clean Air Act.

However, in certain areas the combination of controls on stationary sources and the Federal emission standards for new cars would not be sufficient. Therefore "transportation controls," i.e., measures which would reduce individual vehicle emissions and/or vehicle miles traveled, became necessary. Unlike the situation with respect to stationary sources, however, neither EPA nor the States had any real experience with these types of controls. The nature of the controls required, their effectiveness, their effect on air quality, and their social and economic impacts were essentially unknown. Accordingly, the Administrator determined that it was unreasonable to require that States include transportation controls in the plans submitted on January 31, 1972. He determined that States could instead submit a description of the transportation control measures which they were considering on that date. The submission of the actual transportation control strategies, when required, was deferred until February 15, 1973. It was anticipated that the additional year would give both EPA and the States more time to study this new problem, so that intelligent choices could be made by the States and so that EPA, in accordance with its responsibilities under the law, could make a meaningful review of the strategy selected by the State.

On May 31, 1972, in accordance with the Act, the Administrator disapproved California's plan for the Los Angeles AQCR (South Coast Air Basin) because the plan on its face did not provide for the achievement of the ambient standard for photochemical oxidants, 37 FR 10842, May 31, 1972 (40 CFR 52.238).

On September 6, 1972, in "City of Riverside, et al. v. Ruckelshaus," Civil No. 72-2122-H, the city of Riverside, the city of San Bernardino, and various other organizations and individuals brought suit against EPA in the U.S. District Court for the Central District of California. The complaint stated that the Administrator had failed to promulgate transportation controls for the South Coast Air Basin although such controls were needed and the portions of California's plan which lacked such controls had been disapproved. Pursuant to that complaint, the U.S. District Court determined on November 16, 1972, that the Act did not permit the time for further study of the impact and effectiveness of transportation controls. Accordingly, the Court ordered the Administrator to "• • • prepare and publish in the FEDERAL REGISTER by no later than January 15, 1973, (proposed) regulations setting forth an implementation plan" for attainment of the primary ambient air quality standard for photochemical oxidants. This notice of proposed rule making is in compliance with the Court's order.

The Governor of California requested an extension to 1977 to meet the primary standard for photochemical oxidants. Therefore, this proposal is directed toward meeting that deadline.

It should be noted that the State of California is continuing to develop a transportation control strategy for the South Coast Basin. Since the State may proceed in accordance with the original schedule allowed by EPA, the State strategy is expected to be submitted to EPA in mid-February. It has been the Administrator's policy to be guided in his final promulgation by approvable segments of the State plan.

#### POLLUTION IN THE LOS ANGELES AQCR

The South Coast Air Basin covers a major portion of Southern California, encompassing all of Orange and Ventura Counties, the western portion of Riverside County, the southwest portion of San Bernardino County, the southern coastal portion of Santa Barbara County, and all but the extreme northeastern corner of Los An-

geles County. (The air quality problems of the region are, in many ways, unique). The region is geographically and meteorologically closed. The encircling mountains and frequent inversions hold in pollutants, and the Southern California climate provides ample sunshine to aid the formation of photochemical smog. The automobile is by far [sic] the dominant mode of transportation. For example, in 1972 the South Coast Air Basin contained over 10 million persons and nearly 6 million motor vehicles.

This extremely high automobile population, combined with a low-density, sprawling pattern of development which distributes the population over the entire area of the basin, together make the application of transportation controls as well as the necessary alternatives, e.g., mass transit, extremely difficult in the Los Angeles region. Moreover, the area is still growing. The current rate of population growth is now a 1.7-percent increase per year. However, the automobile population grows more rapidly, at 3 percent to 4 percent per year, and gasoline consumption grows even more quickly, at 4.5 percent per year.

The Primary National Ambient Air Quality Standard for photochemical oxidants is  $160\mu\text{g}/\text{m}^3$  0.08 parts per million (p.p.m.) average for a 1-hour period not to be exceeded more than once per year. The standard, promulgated on April 30, 1971 (36 FR 8186), is based on evidence of increased frequency of asthma attacks in some asthmatic subjects on days when estimated hourly average concentrations of photochemical oxidants reached 0.10 p.p.m. A level of 0.08 p.p.m. was therefore judged necessary by the Administrator to protect public health with an adequate margin of safety, as required by the Act.

In 1970, this standard was exceeded at some location in the Los Angeles AQCR on at least 250 days. The maximum 1-hour reading for oxidants in the region in 1970 was 0.62 p.p.m. in Riverside. This reading exceeded the national standard nearly eight-fold. The second highest reading was 0.58 p.p.m. During 1970 a full 10 percent of the oxidant readings taken in the basin

were 0.40 p.p.m. (five times the national standard) or higher.

#### SUMMARY

Studies presently available to the Administrator indicate that a reduction of approximately 87 percent in projected emissions of reactive hydrocarbons is necessary to achieve the National Primary Ambient Air Quality Standard for photochemical oxidant by 1977 in the Los Angeles AQCR.

As most of the reactive hydrocarbon emissions in the South Coast Basin are attributable to motor vehicle emissions, the analysis available to EPA indicates that in addition to stringent controls for stationary sources and requirements for limiting emission of individual motor vehicles a reduction in vehicle miles traveled (VMT) by gasoline-powered motor vehicles of over 80 percent will have to be effected to achieve the ambient air quality standard for photochemical oxidants in 1977 as required by law. The proposed regulatory mechanism to accomplish the reduction in vehicle miles traveled (VMT) is gasoline rationing.

Based on the extent of analysis which it has been possible to complete so far, the Administrator has concluded that the approach proposed today, including the VMT reduction, is the only one which could be proposed at this time with any confidence that it can achieve the ambient air quality standards. Other approaches, some of which may be less extreme, appear to present problems regarding feasibility and effectiveness. The Administrator emphasizes that further analysis may demonstrate that other options are available.

Although the Environmental Protection Agency (EPA) has serious reservations as to the feasibility and desirability of the course of action proposed here, legal requirements placed on the Agency by the Act leave the Administrator with no presently available legal alternative but to propose this plan. It is clear that extreme measures will be necessary to comply with statutory requirements. Indeed, it appears that any plan that will

attain the primary standard by 1977, whether it includes gasoline rationing or some other strategy to reduce VMT, will lead to significant economic disruptions and will certainly result in a major transformation in the life style of residents of the South Coast Air Basin.

No air pollution control plan for the South Coast Air Basin will be promulgated in final form until full public participation and debate, including public hearings, has taken place. The participation of State and local officials in both the development and the implementation of the plan is also of vital importance. Extensive public hearings will be held upon this and alternative proposals no sooner than 30 days from the date of this notice of proposed rule making. Dates, times, and places, will be announced in a forthcoming issue of the *FEDERAL REGISTER*.

It is hoped that the public debate will focus on the proposed plan, on possible alternative control plans and also on measures (such as the development of a mass transit system) which could reduce the adverse consequences of any plan. The Administrator is concerned that all positive and adverse aspects of the issue be publicly aired and weighed so that resultant decisions will be in the total public interest.

#### CURRENT STUDIES

The Environmental Protection Agency has published the results of an investigation of certain transportation control measures in "Prediction of the Effects of Transportation Controls on Air Quality in Major Metropolitan Areas," (The Six Cities Study), November 1972. Additional information is contained in "Evaluating Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas, Final Report," November 1972. Both reports are available from EPA, Office of Technical Information and Publications, Research Triangle Park, N.C. 27711. Additional information is contained in the EPA document, "Control Strategies for In-use Vehicles," November 1972. This report is available from EPA, Mobile

Source Pollution Control Program, 401 M Street SW., Washington, DC 20460. Specific studies to limit automobile emissions and usage in the Metropolitan Los Angeles Intrastate Air Quality Control Region are currently being done under EPA contract. The results of these studies will be available in February 1973, and preliminary results were used in the development of the proposed regulations.

#### TRANSPORTATION CONTROL ALTERNATIVES

The Administrator's analysis of the air quality problems of the South Coast Air Basin indicates that if all available measures are taken to reduce reactive hydrocarbon emissions from individual motor vehicles and stationary sources, the ambient air quality standard for photochemical oxidants will still be exceeded in the basin approximately 90 days per year in 1977. These 90 days will occur between the months of May and October. The analysis further indicates that motor vehicles, notably automobiles, will be the predominant source of reactive hydrocarbons after all available measures to reduce the emissions of individual vehicles and stationary sources have been taken. Further control measures to meet the ambient air quality standards must therefore consist of reductions in motor vehicle use, or vehicle miles traveled (VMT). A VMT reduction of over 80 percent is required to achieve compliance with the ambient air quality standards in 1977. Lesser reductions are needed in subsequent years as a result of the Federal motor vehicle emissions control program. However, the analysis indicated that VMT reductions of up to 50 percent may be needed as late as 1935 [sic].

The required VMT reductions can be obtained by several alternative means:

- (1) Reduce VMT by the required amount during the entire period, May to October, through increased use of mass transit, increased car pooling, vehicle free zones, gasoline rationing, increasing the cost of motor vehicle

use, limiting the number of automobiles and motorcycles registered, land use controls, or a combination of these.

(2) Forecast up to 24 hours in advance the days on which the ambient air quality standard for oxidants will be exceeded, and use emergency regulatory means to prohibit the use of motor vehicles (or all but certain classes of motor vehicles) on those days. (Intermittent control)

(3) Through application of one or more of the measures listed in (1), reduce VMT enough (perhaps 40 percent) to bring the number of days the ambient air quality standard is violated to a level substantially below 90 days (perhaps to 20 to 25 days). Apply the emergency measures described in (2) on those days for which the air quality standard is forecast to be violated (partial intermittent control). The number of days per year on which these emergency measures must be taken can be expected to decline as the prevalence in the vehicle population of vehicles with 1975 Federal emission controls increases.)

While intermittent or partial intermittent controls may provide potentially attractive alternatives, the effectiveness of such controls, including the technical feasibility of adequately forecasting the need for emergency measures, is uncertain at this time. Various measures to reduce VMT on a continuing basis may be available but present substantial questions as to effectiveness and feasibility. Only gasoline rationing is presently considered to be demonstrably effective to achieve compliance with the ambient air quality standards by 1977. It is expected that the magnitude of needed VMT reductions will decrease beyond 1977 as the prevalence in vehicle population of automobiles with Federal 1975 emissions controls increases, but it does not appear that at any time would Federal 1975 emissions controls alone result in achievement of the ambient standards.

#### PROPOSED CONTROL STRATEGY

The Administrator proposes to require controls on stationary sources and retrofit devices and inspections on automobiles as described below, and to reduce VMT by a system of gasoline rationing, the system to be effective during the smog season, May through October. The amount of rationing may be different for different months, up to an expected maximum of 82 percent. The rationing system may be enforced at the individual vehicle operator's level, with gas coupons required to purchase gasoline. Or it may be enforced at the manufacturer's level only, with price controls at the retail level (to prevent windfall profits) and all gasoline sold on the basis of first-come-first-served. Public comment is invited on these options, and on questions of implementation, including eligibility for coupons, and transferability of coupons. Comment is also invited on the possibility of rationing gaseous fuels.

#### PROPOSED CONTROLS ON STATIONARY SOURCES

Controls to prevent hydrocarbon emissions will be imposed on a variety of stationary sources. The Los Angeles County Air Pollution Control District (APCD) has made changes in its restrictions (Rule 66) on solvent use. We propose that the control in the amended regulation apply to the entire South Coast Basin. Vapor recovery systems that prevent evaporation of gasoline into the air will be required for service stations. In addition, a change in the substance used in industrial "degreasing" operations will be required. Finally, a vapor recovery system that prevents evaporation of solvents into the air will be required of dry cleaners. Should additional stationary source controls prove feasible and desirable, they may be proposed at a later date.

The EPA is currently carrying on an investigation of the adequacy of the local air pollution control district regulations exempting certain organic compounds from control. It is anticipated that these regulations (such as

Rule 66, Los Angeles County) will be reevaluated prior to 1975 after extensive additional experimental studies.

#### PROPOSED CONTROLS ON MOBILE SOURCES

Due to their substantial contribution to hydrocarbon emissions in the South Coast Basin (1,056 tons/day in 1970 vs. 195 tons/day from stationary sources), transportation sources, principally automobiles, also must be controlled. Calculations by EPA indicate that the 1970 mobile emissions are significantly different from those contained in the Implementation Plan submitted by California in February 1972. The difference is attributable to more accurate emission factors that have recently become available (see "An Interim Report on Motor Vehicle Emission Estimation," Kircher and Armstrong, EPA, October 1972, and available from the Office of Land Use Planning, EPA, Research Triangle Park, N.C. 27711). As a result of these calculations, the hydrocarbon emissions from all sources in 1970 are significantly less than in the plan (1,250 tons/day vs 1,590 tons/day reactive HC). The revised emissions values are being incorporated by the State into its present calculations.

Although the Federal emission standards for new cars will impose very stringent emission limitations on new autos beginning in 1975 and 1976, the limitations will not be adequate to meet the national ambient standard in the South Coast Air Basin by the deadline of July 1977, since by that time on [sic] more than 20 to 30 percent of the vehicle population will be 1975 or later cars.

Additional controls will include retrofit devices, installed on pre-1975 automobiles, inspection programs, and gaseous fuel conversion of fleet vehicles. The State of California will require vacuum spark advance disconnection (VSAD) on most 1955 to 1970 cars, and positive crankcase ventilation (PCV) on most 1955 to 1970 cars.

The following controls are proposed by EPA. All light- and heavy-duty gasoline-powered vehicles will be required to be inspected annually using a loaded emis-

sions test (i.e., dynamometer loading test), a test that simulates actual driving conditions. Vehicle owners will be required to have any maintenance performed which is needed to insure that all pollution control devices on the vehicle work properly and the vehicle operates at low pollution levels.

Evaporative controls to prevent evaporation of gasoline from the gas tank and carburetor will be required as retrofit on all 1966 to 1969 model year light-duty gasoline-powered vehicles and on 1966 to 1972 model year heavy-duty gasoline-powered vehicles. A further requirement will be the installation of an oxidizing catalyst on all 1966 to 1974 model year light- and heavy-duty gasoline vehicles.

Finally, all 1971 to 1974 model year light and heavy duty vehicles in all fleets of over 10 vehicles will be required to convert to run on gaseous fuels.

#### PROPOSED REDUCTION IN VMT

Reducing the emissions of each car is not enough to meet and maintain the national standards. The vast number of cars in the basin offsets much of the emissions reduction gained by control devices on individual cars. The combined effect of all the controls to be placed on stationary sources and automobiles mentioned above will reduce the number of days on which the oxidant standard is exceeded to about 90 days per year. In order to meet the more stringent requirement of the law, limitations must be placed upon the amount of driving done in the South Coast Basin.

The highest oxidant reading in 1970 in the South Coast Basin was 0.62 p.p.m., at Riverside, and the plan proposed by the Administrator must be capable of reducing hydrocarbon emissions sufficiently that the reading would not exceed 0.08 p.p.m. To do this, in addition to imposing the controls over stationary and automotive sources described above, VMT must be reduced by approximately 82 percent for the peak period. Reductions will be effected by a system of gasoline ra-

tioning effective during the months of May through October. (Public comment is invited on the possibility of also rationing gaseous fuels.)

The following table is a summary of the effect of each element of the proposed strategy on the overall reduction necessary. The uncontrolled emissions in 1977 are projected to be 691 tons per day of reactive hydrocarbons. The total allowable emissions to meet the 0.08 National Standard are 161 tons per day. All calculations are based on 1970 air quality data as 1970 is the year for which the emissions inventory is available. There is no reason to believe that 1970 was a year of unusually high oxidant concentrations. The 0.62 p.p.m., maximum oxidant value used here is the same as that used by the State to evaluate emission reductions measures after excluding a higher reading whose validity was challenged.

**COMPILATION OF CONTROL STRATEGY EFFECTS ON  
JUNE 30, 1977**

	Tons per day	Percent of total reduction due to each control
Stationary source emissions without control strategy .....	140	
Expected reductions:		
a. Dry cleaning vapor recovery: —6	1	
b. Degreaser substitute ..... —25	5	
c. Other statutory rule strengthening ..... —45	9	
Stationary emissions remaining .....	64	
Motorcycle emissions without control strategy .....	30	
Expected reductions .....	0	
Motorcycle emissions remaining .....	30	

Aircraft emissions without control strategy .....	35	
Expected reductions .....	—11	2
Aircraft emissions remaining .....	24	
Mobile emissions from on-highway light and heavy duty vehicles and from gasoline marketing operations without control strategy .....	486	
Expected reduction:		
a. Gasoline marketing vapor control .....	—37	7
b. VSAD and PCV retrofit .....	—13	2
c. Inspection and maintenance .....	—28	5
d. Vehicle evaporative control retrofit .....	—19	4
e. Gaseous fuel conversion .....	—8	2
f. Oxidizing catalyst retrofit .....	—70	13
g. Gas rationing .....	—269	51
Mobile emissions remaining .....	42	
Total emissions without control strategy .....	691	
Total reductions .....	—531	100
Total emissions remaining .....	160	

The regulations proposed herein implement the basic control strategy. Supplemental regulations will be proposed at a later time.

Additional technical information is contained in: Technical Support Document for the Proposed Transportation Control Strategy for the Metropolitan Los Angeles Intra-state Air Quality Control Region, available from the Region IX Office, Environmental Protection Agency, 100 California Street, San Francisco, CA 94111.

## ECONOMIC AND SOCIAL IMPACT OF THE LOS ANGELES TRANSPORTATION CONTROL PLAN

Congress recognized that achievement of the goals of the Clean Air Act would have a significant impact on many urban areas. A quantitative assessment of the impact of the plan on the economic and social fabric of the community has not been possible due to the lack of time and the innate complexity of the issue. However, we have tried to describe the type of impacts which would occur. First, vehicle owners may have to assume the direct costs of emission abatement equipment to bring their vehicles into compliance. Second, reduction in the mobility of workers and consumers could have a major impact on the economic fabric of the community. Third, interference with the ability of citizens to move as freely will alter the lifestyle of the region. Obviously, the severity of the impact depends on the degree of vehicle usage restrictions, on the manner that direct costs of abatement equipment are financed, and the degree to which the effects can be ameliorated particularly through the development of a mass transit system.

### DIRECT COSTS TO AUTOMOBILE OWNERS

Elements common to all of the transportation control strategies considered are retrofitting of light-duty vehicles, an inspection and maintenance program to insure proper functioning of abatement equipment and emission control devices on gasoline marketing equipment. The cost of control devices could range from \$200 to \$400. The annual cost of inspection/maintenance and the increased cost of gasoline caused by marketing controls is estimated to be \$5 to \$15.

If a sizable share of these costs falls on individual automobile drivers, the burden will weigh more heavily on low-income families. This effect is exacerbated by the fact that older cars, subject to higher abatement equipment costs, tend to be owned by low-income families.

## EFFECT ON THE ECONOMIC FABRIC OF THE COMMUNITY

The direct and indirect effects of the plan on the economy of the basin are obviously dependent on the extent of the reduction in VMT.

*Wage and salary earners.* If VMT reductions resulted in workers missing work, loss of income could result. Such a loss of income would have a corresponding impact on purchasing power affecting business sales. If a mass transit system could be developed to replace the use of autos in work-related trips ( $\frac{1}{3}$  of VMT), then the income loss could be minimized.

The monetary cost to the worker of shifting from the auto to mass transit would depend on the degree of transit fare subsidization.

*Service and retail industry.* The impact on service and retail establishments will depend on the ability of a mass transit system to service nonwork trips. Further study is clearly needed to assess how well and at what cost a transit system could fulfill this task. We would expect, however, that it is easier to design a transit system to carry work-related trips.

The use of autos for nonwork-related trips depends on the control strategy. Gas rationing places a limit on the number of miles traveled. Intermittent controls limit travel during crisis periods but allow travel at other times. Intermittent controls would have less of an impact on buying activities by consumers if people can tailor their nonwork trips to correspond with non-crisis periods. People may be able to delay shopping and recreation trips for days, thus alleviating the impact of decreased mobility on sales. Alternatively, service and retail establishments may be able to tailor sales hours to nonpeak, noncrisis periods.

The adverse effect on service and retail sales also depends critically on the ability of individuals to economize on nonwork trips and still shop and engage in recreation activities. We simply do not know the extent to which nonwork trips can be combined or eliminated resulting in a significant decrease in the number of miles traveled without a deterioration in the standard of living.

*Manufacturing, wholesale trade and the distribution system.* Maintenance of the system to distribute goods is critical to the viability of the economy, especially for life-sustaining necessities.

Large trucks are already largely diesel powered and would be allowed to operate under the proposed plan. Fleet vehicles could convert to gaseous fuel at a cost of \$500 to \$800 per vehicle. Smaller gasoline powered trucks and vehicles would have to be retrofitted with control devices. Their operation would, however, be restricted under gas rationing or under intermittent controls during crisis periods.

Cost of doing business may rise to an unknown extent. Business may also be faced with increased pressure for higher wages and salaries as workers try to offset increased costs to the individual resulting from the transportation control plan. It is not known whether such cost increases will be significant enough to affect the competitive position of firms in the South Coast Air Basin, causing them to lose sales both within the South Coast Air Basin and on goods now produced within the basin and sold to other markets.

Time limitations have made it impossible to investigate effects on specific industries. Some industries will be adversely affected, while others will experience an increase in sales. For instance, the burden would fall very hard on service stations and automobile supply outlets. On the other hand, the demand for mass transit and communications facilities will increase. Even with more time, it is not clear that a reasonable estimate of the impact on specific industries could be made.

#### TAX REVENUE IMPLICATIONS

The transportation control plan will have direct and indirect effects on local, State, and Federal tax revenues. Some illustrative impacts are cited below.

It is not clear whether property taxes collected in the South Coast Air Basin will rise or fall. It seems certain that property values will change depending on lo-

cation. For example, property near shipping and work zones will increase in value while that in suburban vicinities will decrease.

Excise, sales, profit, and income taxes would probably decline if purchasing power in the South Coast Air Basin diminishes. Excise taxes from gasoline would certainly fall. However, declines in revenues related to some forms of spending (gasoline) will be offset to some degree by increased expenditures for other goods.

The effect on State and local budgets will also depend on whether subsidies and/or new taxes (parking, gasoline) related to the transportation control plan will be instituted.

#### SUMMARY OF IMPACTS

Maintenance of the economic fabric of the South Coast Air Basin requires:

(1) Workers being able to get to and from their jobs so that production and labor income can be maintained.

(2) Sufficient commercial vehicular mobility to allow the distribution system to function effectively.

(3) Sufficient mobility to roughly maintain the present pattern and level of spending (shopping, recreation, etc.).

The inability to perform any of these basic economic functions would cause serious dislocations to the South Coast Air Basin economy leading to the loss of jobs, which in turn leads to lower purchasing power, and drops in sales.

The viability of the economy may be adversely affected under any significant reduction of VMT. The monetary cost of improved air quality will be significant, although how seriously this might affect industry is undetermined. How serious the impact will be depends critically on supplementary policy actions designed to maintain the standard of living especially:

(1) The development of a mass transit system to substitute for automobiles.

(2) The extent of subsidization of abatement equipment and a mass transit system.

(3) The degree to which people are able to economize on their use of the automobile and still perform the functions which support their standard of living.

#### EPA EFFORTS TO MITIGATE THE EFFECTS OF PROPOSED REGULATIONS

The combined effect of these proposed regulations, together with the California Implementation Plan, will eliminate the danger to human health and welfare that exists in the South Coast Air Basin from air pollution. They will, however, have a great economic and social impact. The Administrator will make every effort possible to mitigate the effects of his final promulgation. He will be in contact with the Department of Transportation and other departments as necessary. The Administrator of EPA will request that the departments and agencies give special attention to the needs of the South Coast Air Basin for strategies to reduce VMT and for mass transit to replace the automobile travel eliminated by the proposed controls, aid to those whose businesses are damaged by restricted automobile travel, and aid to those whose jobs are affected by the proposals (particularly those in the automobile service industries, such as service stations and mechanics).

#### THE NEED FOR MASS TRANSIT

The development of large-scale mass transit facilities in the Los Angeles area is essential to any effort to mitigate the disruptions that can be caused by significant reductions in automobile use. A public mass transportation system that can absorb the travelers displaced by sizable reductions in gasoline consumption or vehicle miles traveled will have to be considerably more extensive than the system now existing in Los Angeles. The existing Los Angeles Rapid Transit District system consists of about 1,500 buses. The maintenance of reasonable mobility of the commuter will require many

times this number of buses together with many service improvements to provide viable alternative transportation modes. Although the Administrator may not have authority to direct Los Angeles to provide expanded mass transit facilities, he is firmly of the belief that such expanded facilities are essential to the success of any air pollution control strategy for the South Coast Air Basin. The Administrator therefore is conducting an investigation of the needs and possibilities for transit expansion in the basin and he encourages and will provide all possible support to efforts by Federal, State, local governmental, and private groups to expand the mass transit facilities in the basin.

The Administrator recognizes that the present low density, sprawling land use pattern in the Los Angeles area is not conducive to the efficient use of mass transit. The long-term problems of attaining and maintaining high levels of transit service and usage would be considerably eased through the application of public policy measures to promote the centralization and corridorization of activities that generate large demands for transportation. The time period required for such policy measures to take effect prohibits their use by the Administrator to achieve the ambient air quality standards by 1977. In addition, such measures would not eliminate the need for many of the emissions control measures proposed here. However, proper land use policies would greatly assist the long-term implementation of such emissions control measures as VMT reductions.

#### PUBLIC COMMENTS SOLICITED

Although the Administrator has concluded that the proposed plan is the only approach available to him at the present time that is demonstrably capable of achieving compliance with the requirements of the Act, further analysis may demonstrate that more appropriate options are available. He therefore desires to obtain the comments and suggestions of the public on the problems of achieving the ambient air quality standards in

the South Coast Air Basin. Comments are particularly invited pertaining to measures that may be taken by Federal, State, or local authorities to support or supplement the proposed air pollution control strategy for the basis [sic] (e.g., expanded mass transit), means of implementing these measures, and the comparative social and economic effects of alternative pollution control measures.

Questions also exist as the EPA's authority and capability for actual implementation of this proposal and of alternatives. These questions include the extent to which State or local governments should be required to perform functions contemplated by the proposal and the difficulties involved in Federal or State enforcement of the plan.

Extensive public hearings will be held on this and alternative proposals no sooner than 30 days from the date of this notice of proposed rule making. Dates, times, and places will be announced in a forthcoming issue of the *FEDERAL REGISTER*.

The Administrator's final promulgation of transportation controls for the South Coast Basin will be profoundly influenced by the comments and testimony he receives, as well as by the approvable strategies submitted by the State in mid-Februray as part of the State plan. These influences, and the additional analysis of alternative strategies that can be made in the time between this proposal and final promulgation, may lead the Administrator to adopt final regulations that differ in important ways from this proposal.

#### SUBMITTAL OF WRITTEN COMMENTS

Interested persons may participate in this rule making by submitting written comments, preferably in triplicate to the Regional Administrator, EPA, Region IX, 100 California Street, San Francisco, CA 94111. All relevant comments received not later than March 23, 1973, will be considered. Receipt of comments will be acknowledged, but substantive responses to individual comments will not be provided. Comments received will be available for public inspection during normal business hours

at the EPA Region IX Office, and at locations to be announced in the Los Angeles area. The changes proposed by this notice with appropriate modification will be effective on January 22, 1973. This notice of proposed rule making is issued under the authority of section 110(c) and 301(a) of the Clean Air Act (42 U.S.C. 1857 et seq.).

Dated: January 15, 1973.

WILLIAM D. RUCKELSHAUS,  
Administrator,  
*Environmental Protection Agency.*

It is proposed to amend Part 52 of the Chapter I, Title 40, of the Code of Federal Regulations as follows:

#### Subpart F—California

1. Section 52.229 is amended by adding paragraphs (b) through (j), as follows:

§ 52.229 Control strategy and regulations: Photochemical oxidants (hyrdocarbons), Metropolitan Los Angeles Intrastate Region.

\* \* \* \* \*

- (b) *Regulation for control of evaporative emissions.*  
(1) For purposes of this paragraph:

(i) "Evaporative control device" means a device installed on a motor vehicle to prevent the escape of gasoline vapor from the gasoline tank and carburetor.

(ii) "Registered" as applied to a motor vehicle, means that such motor vehicle is duly licensed for general operation on public roads or highways by the appropriate agency of the Federal Government or by the State.

(2) This regulation is applicable in those portions of Los Angeles, Orange, San Bernardino, Riverside, Ventura,

and Santa Barbara Counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. The requirements of this regulation shall be effective commencing on January 1, 1976.

(3) Prior to January 1, 1976, an evaporative control device of at least 85 percent efficiency which is approved by the Administrator shall be properly installed, in good working order, and in operation on all registered light-duty gasoline-powered vehicles of model years 1966 through 1969 and all registered heavy-duty gasoline vehicles of model years 1966 through 1972. Approved evaporative control devices shall be installed on a schedule determined by the Administrator.

(4) After January 1, 1976, the following shall apply in the areas specified in paragraph (b) (2) of this section:

(i) The State of California shall not register light-duty vehicles which do not comply with the provisions of paragraph (b) (3) of this section.

(ii) No owner of light-duty vehicles shall operate or allow the operation of such vehicles which do not comply with the provisions of paragraph (b) (3) of this section.

(c) *Regulation for gaseous fuel conversion.* (1) For purposes of this paragraph:

(i) "Fleet vehicle means any one of ten (10) or more light- and heavy-duty vehicles operated by the same person(s) or business and used principally in connection with the same occupation or related occupations.

(ii) "Gaseous fuel" means liquified or pressurized petroleum or natural gases which are used as fuel for light-duty vehicles.

(2) This regulation is applicable in those portions of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Santa Barbara Counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. The requirements of this regulation shall be effective commencing on January 1, 1976.

(3) All registered gasoline-powered fleet vehicles of model years prior to 1975 shall be equipped for and operated on gaseous fuel by the effective date of this regulation. Conversion of such fleet vehicles for use of gaseous fuel shall be on a schedule determined by the Administrator.

(4) After January 1, 1975, the following shall apply in the areas specified in paragraph (c) (2) of this section:

(i) The State of California shall not register vehicles which do not comply with the provisions of paragraph (b) (3) of this section.

(ii) No owner of fleet vehicles shall operate or allow the operation of such vehicles which do not comply with the provisions of paragraph (c) (3) of this section.

(d) *Regulation for yearly inspection and maintenance.*

(1) For purposes of this paragraph: "Inspection and maintenance" means a program to reduce emissions from in-use vehicles through identifying vehicles that need emissions control related maintenance and requiring that maintenance be performed.

(2) This regulation is applicable in those sections of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Santa Barbara Counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. The requirements of this regulation shall be effective commencing on January 1, 1975.

(3) All registered gasoline-powered light- and heavy-duty motor vehicles shall be inspected annually for emissions and, as necessary, maintained by the owner in order to pass the inspection. This shall be done by personnel, facilities and procedures which shall be proposed and promulgated by the Administrator.

(4) After January 1, 1975, the following shall apply in the areas specified in paragraph (d) (2) of this section:

(i) The State of California shall not register light-duty vehicles which do not comply with the provisions of

paragraph (d) (3) of this section and procedures promulgated pursuant thereto.

(ii) No owner of light-duty vehicles shall operate or allow the operation of such vehicles which do not comply with the provisions of paragraph (d) (3) of this section.

(e) *Regulation for oxidizing catalyst.* (1) For the purposes of this paragraph: "Oxidizing catalyst" means a device installed in the exhaust system of the vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbons and carbon monoxide from that vehicle.

(2) This regulation is applicable in those sections of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Santa Barbara Counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. The requirements of this regulation shall be effective commencing on January 1, 1975.

(3) All registered gasoline-powered light- and heavy-duty motor vehicles of model years 1966 through 1974, shall be equipped with an appropriate oxidizing catalyst exhaust retrofit in accordance with paragraph (e) (2) of this section, approved by the Administrator.

(4) After January 1, 1975, the following shall apply in the areas specified in paragraph (e) (2) of this section:

(i) The State of California shall not register light-duty vehicles which do not comply with the provisions of paragraph (e) (3) of this section.

(ii) No owner of light-duty vehicles shall operate or allow the operation of such vehicles which do not comply with the provisions of paragraph (e) (3) of this section.

(f) *Regulation for purchase of gasoline.* (1) For purposes of this paragraph:

(i) "Control period" means a portion of a calendar year in which gasoline sales are regulated.

(ii) "Retail outlet" means any service station, filling station, garage, store or other place of business at which gasoline is transferred directly to consumers in the regular course of business.

(2) This regulation is applicable in those portions of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Santa Barbara Counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. The requirements of this regulation shall be in effect commencing May 1, 1975, and shall remain in effect through October 31, 1975. The regulation shall be effective in the same control periods during each calendar year thereafter, until such time as the Administrator determines the regulation to be no longer necessary for the attainment and maintenance of the national standard for photochemical oxidants (hydrocarbons).

(3) During the control periods, as specified in paragraph (f) (2) of this section, the sale of gasoline to retail outlets and to the owners and operators of motor vehicles shall be controlled by directions of the Administrator, EPA.

(4) The amount of gasoline to be controlled shall be determined by the Administrator no later than 30 days prior to the effective date of a control period. This determination shall be based on the hydrocarbon emission reduction required for the attainment and maintenance of the national standard for photochemical oxidants in Metropolitan Los Angeles Intrastate AQCR.

(g) *Volatile organic compound loading facilities.* (1) This regulation is applicable in those portions of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Santa Barbara Counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. The requirement of paragraph (g) (2) of this section shall be effective commencing July 1, 1973.

(2) No person shall load or allow the loading of volatile organic compounds having a vapor pressure of 1.5 pounds per square inch absolute or greater, under actual storage conditions, into any tank truck or trailer, railroad tank car, locomotive, aircraft, stationary storage tank with a capacity greater than 5 gallons from any loading facility unless such tank or loading facility

is equipped with a vapor collection and disposal system, or its equivalent, properly installed, in good working order, and in operation. Loading shall be accomplished in such a manner that all displaced vapor and air will be vented only to the vapor disposal system. A means shall be provided to prevent liquid organic compound drainage from the loading device when it is removed from the hatch, or to accomplish complete drainage before such removal. The vapor disposal portion of the system shall consist of one of the following:

(i) An absorber system or condensation system with a minimum recovery efficiency of 90 percent by weight of all the volatile organic compound vapors and gases entering such disposal system.

(ii) A vapor handling system which directs all vapors to a fuel gas system.

(iii) Other equipment of at least 90 percent efficiency, provided plans for such equipment are submitted to and approved by the Air Pollution Control Officer.

Intermediate storage vessels may be used prior to disposal of vapors under paragraph (g)(2) (i), (ii), or (iii), provided they are so designed as to prevent release of vapors at any time during use.

(3) Notwithstanding paragraph (g)(2) of this section, no person loading or allowing the loading of the above specified compounds in the above specified storage vessels from the above specified loading facilities, any of which were in existence on the effective date of this regulation, or in the process of being installed for use on said effective date, shall be subject to the provisions of paragraph (g)(2) of this section until January 1, 1974: *Provided, however,* That such person is hereby required to file on or before July 1, 1973, a compliance schedule with the Administrator showing how the person will bring his operation into compliance with paragraph (g)(2) of this section on or before January 1, 1974. Failure to file such compliance schedule or abide by its terms shall render the prohibition contained in paragraph (g)(2) of this section immediately applicable to such person on July 1, 1973, or on the date of said per-

son's failure to abide by said compliance schedule, whichever is later.

(h) *Control of drycleaning solvent evaporation.* (1) For the purposes of this paragraph: "Drycleaning operation" means that process by which an organic solvent is used in the commercial cleaning of garments and other fabric materials.

(2) This regulation is applicable in those portions of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Santa Barbara counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. The requirements of this regulation shall be effective commencing on January 1, 1974.

(3) No person shall operate a drycleaning operation unless the uncontrolled organic emissions from such operation have been reduced at least 85 percent.

(4) Drycleaning operation emitting less than three (3) pounds per hour and less than 15 pounds per day are exempt from this regulation.

(5) If incineration is used as a control technique, 90 percent or more of the carbon in the organic compounds being incinerated must be oxidized to carbon dioxide.

(6) Drycleaning operations using solvents considered nonreactive by Rule 66 part (k) of the Los Angeles APCD current regulations are exempt from this regulation.

(i) *Degreasing operation.* (1) For the purposes of this paragraph: "Degreasing" means the operation of using an organic solvent as a surface cleaning agent prior to fabricating, surface coating, electroplating or any other process.

(2) This regulation is applicable in those portions of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Santa Barbara Counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. The requirements of this regulation shall be effective commencing on January 1, 1974.

(3) No person shall use trichloroethylene (TEC) degreaser as a degreasing solvent.

(j) *Organic solvent usage: Federal regulation replacing parts of Rule 66 of Los Angeles, Orange, and San Bernardino Counties, Rule 36 of Santa Barbara County, Rule 69 of Riverside County, and Rule 66 of Ventura County.* (1) This regulation is applicable in those portions of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Santa Barbara Counties contained within the Metropolitan Los Angeles Intrastate Air Quality Control Region (AQCR) in the State of California. This regulation is effective immediately upon promulgation.

(2) Subparagraph i of Rule 66 of Los Angeles, Orange, and San Bernardino Counties, Rule 36 of Santa Barbara County, Rule 69 of Riverside County, and subparagraph 8 of Rule 66 of Ventura County as contained in the Local Air Pollution Control District Regulations for the South Coast Air Basin, Implementation Plan for the State of California, is amended by replacing subsubparagraph 5 (subsubparagraph e in the case of Ventura County), and adding in place thereof the following subsubparagraphs 5, 6, and 7 (e, f, and g in the case of Ventura County): [i The provisions of this rule shall not apply to:]

\* \* \* \* \*

5. The use of any material, in any article, machine, equipment or other contrivance described in sections (a), (b), (c) or (d), if:

- (i) The volatile content of such material consists only of water and organic solvents, and
- (ii) The organic solvents comprise not more than 20 percent by volume of said volatile content, and
- (iii) The volatile content is not photochemically reactive as defined in section (k), and
- (iv) The organic solvent or any material containing organic solvent does not come into contact with flame.

6. The use of any material, in any article, machine, equipment or other contrivance described in sections (a), (b), (c), or (d), if:

(i) The organic solvent content of such material does not exceed 20 percent by volume of said material, and

(ii) The volatile content is not photochemically reactive as defined in section (k), and

(iii) More than 50 percent by volume of such volatile material is evaporated before entering a chamber heated above ambient application temperature, and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame.

7. The use of any material, in any article, machine, equipment or other contrivance described in sections (a), (b), (c), or (d), if:

(i) The organic solvent content of such material does not exceed 5 percent by volume of said material, and

(ii) The volatile content is not photochemically reactive as defined in section (k), and

(iii) The organic solvent or any material containing organic solvent does not come into contact with flame.

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Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL PROTECTION  
AGENCY

SUBCHAPTER C—AIR PROGRAMS

PART 52—APPROVAL AND PROMULGATION  
OF IMPLEMENTATION PLANS

Approval of Transportation and/or Land Use  
Controls

On April 30, 1971, pursuant to section 109 of the Clean Air Act, as amended, the Administrator promulgated national primary and secondary ambient air quality standards for six pollutants. The act requires that the primary standards protect the public health with an adequate margin of safety, and that the secondary standards protect the public welfare from any known or anticipated adverse effects. Under section 110 of the act, States were required to prepare and submit to the Administrator plans for implementing the national ambient air standards in each air quality control region in the State. The Administrator published on May 31, 1972, his initial approvals and disapprovals of State implementation plans developed and submitted under these provisions of Federal law.

The presence in the ambient air of three of the pollutants for which control strategies were required to be submitted by States—carbon monoxide, hydrocarbons, and photochemical oxidants—is largely attributable to motor vehicles; consequently many States were unable to formulate, and submit, adequate control strategies that utilized only limitations on emissions from stationary sources. However, as the Administrator noted in his May 31 approval/disapproval of implementation plans, neither the States nor the Environmental Protection Agency had any practical experience that would permit the development of meaningful transportation control schemes or the prediction of their impact on air quality. States were ad-

vised that adoption of transportation control schemes could be deferred beyond the statutory deadline for submittal of implementation plans but those plans would have to define the degree of emission reduction to be achieved through transportation control measures and identify the measures being considered. States were required to submit adopted transportation control strategies no later than February 15, 1973.

Many States requested 2-year extensions pursuant to section 110(e) of the act for the attainment of the primary standards for these pollutants based on the unavailability of transportation control measures. The Administrator determined that, in fact, transportation control measures would not be available soon enough to permit attainment of the primary standards within the 3-year time period prescribed by the act; therefore, 2-year extensions were granted at the request of those States that had determined that transportation control measures would be necessary. In some cases, this meant that States were required to submit on February 15, 1973, transportation and/or land-use control measures that would achieve the standards by 1977. In other cases, the 2-year extension meant that certain States would not have to submit transportation control measures because the Federal motor vehicle control program (FMVCP) and/or stationary source control would be adequate to achieve the standards by 1977 without the application of any other transportation and/or land-use measures. In order to assist the States in the development of transportation control strategies, the Environmental Protection Agency conducted numerous studies and made their results available to the States. In addition, contract assistance was provided in developing the strategies for 14 of the affected regions, and the reports of these studies have been made available to all the States.

On January 31, 1973, the U.S. Court of Appeals for the District of Columbia Circuit decided the case of *Natural Resources Defense Council Inc., et al. v. Environmental Protection Agency* (civil action No. 72-1522) and seven related cases, hereafter referred to as *NRDC v.*

EPA. It issued an order which held that the Clean Air Act does not permit the delay in submission of transportation control portions of State implementation plans until February 15, 1973, or permit the granting of extensions to mid-1977 for attainment of the national primary air standards where plans had not been submitted. The order required the Administrator to formally rescind through notice to the States and publication in the FEDERAL REGISTER the extension of time granted for submission of transportation and/or land-use control portions of implementation plans. It also required the Administrator to formally rescind in the same manner the extension granted to several States to delay implementation of their plans or portions thereof until May 31, 1977. The court ordered the Administrator to inform the States concerned that "all States that have not yet submitted an implementation plan fully complying with the requirements of the Clean Air Act of 1970 must submit such a plan by April 15, 1973. That plan must satisfy each and every requirement of section 110(a)(2) (A)-(H) if it is to be approved by the Administrator. In particular, it must provide for the attainment of the primary standards as expeditiously as practicable but in no case later than May 31, 1975, \* \* \*."

In accordance with this order, 22 States including the District of Columbia were notified by telegram on February 5, 1973, that any extensions granted because of the unavailability of transportation and/or land-use controls were canceled and that plans for the attainment and maintenance of the standards for these three pollutants would be required by April 15, 1973. A FEDERAL REGISTER notice was issued on March 20, 1973 (38 FR 7323), to complete the requirements of that court order by specifically amending the provisions of this part with regard to each of the States concerned. These amendments provided that every State which was granted an extension to achieve those primary standards and/or permitted to defer submittal of the transportation and/or land-use control strategies until February 15, 1973, would be required to submit no later than April 15, 1973, transportation and/or land-use controls which will show achievement of the standards by 1975. In addi-

tion to those States which were required to submit transportation and/or land-use control strategies on February 15, a number of other States which had regions that would not achieve the standard by 1975 but which had not been required to submit transportation control strategies because the FMVCP was thought capable of achieving the standards by 1977 were required to submit transportation control strategies on April 15. States that were not granted an extension but that had deficient plans were also required to submit transportation control strategies on April 15, 1973. Strategies adopted by the States must provide for attainment and maintenance of these standards by May 31, 1975. At the time of submission of these plans on April 15, the Governors of the States could request an extension up to 2 years for compliance with the provisions of these plans if the specific requirements of section 110(e) are satisfied by the State plan.

To date, 16 States including the District of Columbia have submitted plans. These plans have been reviewed by the Department of Transportation, as well as by the Environmental Protection Agency, and have also been made available for public review and comment. Based upon the comments received and the Agency's evaluation of the plans in light of pertinent legal requirements, the Administrator is taking action to approve or disapprove inadequate portions of these plans.

The approval/disapproval decisions are based on a detailed evaluation of plans submitted by the States. Criteria for this evaluation include adequacy of control strategies, control plan adaption [sic] and submission procedures, accuracy of air quality data and emissions inventories, extension request considerations, provisions for air quality and source surveillance, review of legal authority, adequacy of resources, and provisions for intergovernmental cooperation.

Where the Administrator disapproves a State plan or portion thereof, or where a State fails to submit an implementation plan or portions thereof, the Administrator is required, under section 110(c) of the act, to propose and subsequently promulgate regulations setting forth a

substitute implementation plan or portions thereof. Where regulatory portions of a State plan, including control strategies and related rules and regulations, are disapproved or were not submitted, regulations setting forth substitute portions will be proposed and promulgated. When disapproved portions are of a non-regulatory nature, e.g., air quality surveillance, resources, and intergovernmental cooperation, and therefore are not susceptible to correction through promulgation of regulations by the Administrator, detailed comments will be included in the evaluation report; in such cases, the Environmental Protection Agency will work with the States to correct the deficiencies.

To the extent possible, the Administrator's evaluation of State plans reflects the latest information submitted by the States. In the interest of giving States every opportunity to bring their implementation plans into full compliance with the act and 40 CFR, part 51, the Environmental Protection Agency has notified States that modifications submitted after the deadline for submittal of State plans would be accepted and considered provided that such modifications were made and submitted in accordance with the requirements of 40 CFR, part 51. Accordingly, many States have been, and still are, making and submitting modifications of their implementation plans. Where such modifications were not received in time to affect the Administrator's approval or disapproval today of a State plan or portion thereof, appropriate changes to this part will be published as soon as the Administrator's evaluation of such modifications has been completed.

The act directs the Administrator to require a State to revise its implementation plan whenever he finds that it is substantially inadequate for attainment and maintenance of a national standard. In accordance with the statutory mandate, the Environmental Protection Agency will make a continuing evaluation of the State plans and will, as necessary, call upon the States to make revisions.

A discussion of the available transportation control alternatives, and the Administrator's approvals and disapprovals, is set forth below. A more detailed description of disapproved portions, together with an explanation of the basis for disapproval, will be provided to the States. Copies of these evaluation reports are available for public inspection at the Freedom of Information Center, Office of Public Affairs, Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460, and in the Agency's regional offices.

#### TRANSPORTATION CONTROL ALTERNATIVES

Transportation control plans provide for reductions in carbon monoxide and hydrocarbon levels required beyond the reductions provided by the Federal motor vehicle emissions control program and stationary source regulations set forth in the previously approved State implementation plans. These reductions are to be accomplished through the implementation of the transportation control alternatives discussed below. The appropriateness of a particular alternative is determined by the pollutant controlled (carbon monoxide or oxidant) as well as by the characteristics of the specific air quality control region such as topography, demography, climatology and institutional arrangements.

The control of carbon monoxide is influenced by its lack of reactivity and its localized dispersion characteristics. High ambient carbon monoxide concentrations can be decreased by reducing the density of emissions in a specific area of interest. In addition to control measures that would reduce the emission potential of the individual vehicle, a variety of traffic control measures can be utilized to reduce ambient carbon monoxide levels in high concentration areas. Three general types of traffic controls have been considered—measures to improve traffic flow, programs to reduce total vehicle miles of travel (VMT), and programs to shift traffic away from high concentration areas. Depending upon the local situation, all three can be effective in reducing carbon

monoxide levels. However, traffic flow improvements must often be accompanied by restrictions that will prevent the latent travel demand from recongesting traffic arteries. Traffic flow can be improved through various traffic engineering programs as well as through staggered work hours. Strategies to reduce total vehicle miles of travel include auto-free zones, increased parking fees, 4-day workweeks, and improved public transit. Carbon monoxide levels can in many cases be reduced by the temporal or spatial redistribution of the emissions, which is especially applicable to localized high ambient concentrations such as occur in many central business districts (CBD). Reduction of air quality in the surrounding area must be considered when spatial redistribution is utilized as a control measure.

Photochemical oxidant, primarily ozone, is a secondary pollutant; it results from the reaction of two primary pollutants (hydrocarbons and nitrogen oxides) in the presence of sunlight. As such, it differs from carbon monoxide in that there exists a lag time between the emissions of the primary pollutants and the formation of the secondary pollutant; therefore, the reduction of oxidant concentrations depends upon reduction in precursor (primary pollutant) emissions over a much wider area than required for the reduction of primary pollutant concentrations. The extent of the reduction in hydrocarbon emissions required to meet the air quality standards for oxidants, as determined by statistical evaluation of observed data, is specified in 40 CFR, part 51, appendix J. Control measures such as inspection/maintenance, retrofit, increased parking fees and road tolls, 4-day workweeks, car pooling, improved mass transit, "smog taxes" on automobiles and gasoline, gasoline rationing, etc. can be used to reduce hydrocarbon emissions over a wide area. Traffic flow measures or controls that redistribute the emissions over time or space are not considered effective in reducing photochemical oxidants.

Measures which reduce both carbon monoxide and hydrocarbon emissions from vehicles include inspection/maintenance programs and vehicle retrofit devices. Esti-

mates of the effectiveness of these measures were provided in a notice of proposed rulemaking published January 12, 1973 (38 FR 1467) and promulgated in final form on June 8, 1973 (38 FR 15193). Alternative transportation control measures contained in State plans such as improvements in mass transportation, car pooling, methods of gaining a general reduction in vehicle miles traveled, traffic flow improvements, inspection and maintenance measures as well as retrofit programs, are discussed in subsequent sections.

#### MASS TRANSIT

Since automobiles are the major source of carbon monoxide and hydrocarbon emissions in most cities, it would be desirable from an air quality standpoint if many trips presently made by auto could be diverted to other modes of travel.

It should be pointed out that any mass transit improvements requiring major construction, such as the extension of existing fixed-route systems or the building of new systems, cannot be completed by 1975 or 1977 unless such construction is already underway. Accordingly, for purposes of achieving the carbon monoxide and oxidant air quality standards by the statutory deadlines, mass transit strategies must focus on alternative systems, primarily bus transit, and on immediate improvements in existing systems. Much can be done to improve existing fixed-route and bus systems in order to increase their attractiveness to the traveling public. Such improvements could include modifications in schedules, routes, and fare structures; preferential treatment facilities for bus transit, such as exclusive bus lanes; park-and-ride facilities; measures to increase the comfort and security of passengers; and improved public information and marketing programs.

Where mass transit improvements are not sufficient to significantly reduce auto travel, as is generally the case, disincentives to, and restraints on, auto travel may be needed. Economic disincentives such as higher parking charges and tolls, higher gasoline taxes, and higher fees

for auto registration might be used for this purpose. Alternate modes of transportation must be available concurrent with the imposition of vehicle restraints in order to retain mobility for the public.

Techniques that improve mass transit service and simultaneously restrain the automobile may be effective in diverting auto riders to mass transit. Provision for exclusive lanes for buses and carpools which simultaneously reduce road capacity available to the auto is an example. Other techniques would include priority metering for buses on expressway ramps, bus-priority signalization, and auto-free zones.

Many States have proposed mass transit improvements as part of their programs to meet ambient air quality standards. In some cases, States have made excessive or unsubstantiated claims of emission reductions resulting from mass transit improvements. In these cases, the Administrator has exercised his judgment in assigning different emission reductions. As in the case of traffic flow improvements, such an estimate has not in itself resulted in disapproval of a control strategy where the control strategy provided sufficient margin or included adequate contingency measures.

#### CAR-POOLING

Increasing the average occupancy rate of automobiles is a conceivable method of reducing vehicles miles traveled (and thus automotive air pollutant emission) without unduly restricting personal mobility. Experimental programs have shown that incentive measures such as express lanes, reduced tolls, and preferential parking can lead to the formation of car pools. Innovative carpool locator and information systems can also be used to assist in the formation of groups of individuals who live and work near each other and who have compatible work schedules. These programs will allow trip making while reducing air pollution emissions and the drain on natural resources.

#### REDUCTION IN VMT

Measures such as mass transit, car pools, bus lanes, parking restrictions, increased bridge tolls, gas rationing, and others are designed to reduce the vehicle miles traveled (VMT). The Administrator believes that some reduction in VMT can be reasonably achieved by 1975 by employing available transportation control strategies. Application for time extensions to meet standards therefore cannot be granted until some reduction in VMT can be shown by control strategies submitted in state plans.

Information available on possible VMT reductions is incomplete. It is as true today as it was a year ago that states have had practically no experience with transportation control measures as a means of dealing with air quality problems. Aside from the Nation's experience during World War II (gasoline rationing), no one knows what the public response to significant measures for reducing VMT will be. The studies that have been made on this point are inadequate and are necessarily hypothetical until the measures have actually been put into effect. Public attitudes in major urban areas do appear to be changing, however, and are becoming less favorable to the continued use of automobiles on the present scale.

Finally, even the ability of different modes of transportation to absorb the demand for trips that would be created by a significant VMI [sic] reduction will vary greatly with the individual characteristics of the city involved. No firm projection of what alternative transportation is available can be made without a detailed traffic study of the individual region, and, for the most part, such studies have not been made.

It is clear, however, that the authors of the clean air amendments of 1970 anticipated that substantial VMT reductions might be necessary to achieve the standards. The Senate report on the act states that "until the vehicle population is largely made up of cars that meet the 1975-76 standards, as much as 75 percent of the

traffic may have to be restricted in certain large metropolitan areas if health standards are to be achieved within the time required by this bill."

It is also clear from the January 31, 1973, court of appeals decision that if VMT reduction measures are reasonably available by 1975, and if the standards cannot be achieved without them, they must be put into effect. This is true even though the restrictions may be necessary only for a few years until cleaner cars come into more widespread use. Against this background, the Administrator has reexamined the question of VMT reduction and has concluded that a reduction in VMT in 1975 is a feasible and necessary measure for many regions.

Though some reduction in the use of private automobiles may be expected simply from the use of measures designed to increase the attractiveness of other means of transportation, VMT reductions can only be assured through the use of some form of restraint or disincentives to vehicle usage.

A measure cannot be considered "reasonably available," if putting it into effect would cause severe economic and social disruption. Although some reduction in personal travel could certainly be absorbed without such disruption, achievement of a significant VMT reduction will require that the majority of the travel displaced from single-passenger automobiles be absorbed by other modes of transportation such as car pools and public transit, or by walking or bicycling.

The only significant expansion of public transit facilities that can be accomplished by 1975 except where construction is already underway is the upgrading and physical expansion of bus services. Much however, can be done in this regard. Scheduling and service can be improved and optimized. Individual lanes of freeways and other major roads can be set-aside for the exclusive use of buses. Significant numbers of new buses can be purchased and put into service by then. According to Department of Transportation figures, 2,500 transit buses were sold in this country in 1972, but the transit

industry's production capacity is projected to be more than 6,000 buses a year by 1975.

Sufficient alternative transportation capacity appears to be available now, or will be available by 1975, to allow significant VMT reductions (perhaps 10 to 15 percent) by 1975 in most of the Nation's cities. Further significant reductions should be possible by 1977. Alternative transportation capacity exists partly in present mass transit facilities, or can be created through the expansion of bus service. In part it exists in the possibility that many short trips now made by car could be made by bicycle or on foot.

A major part of the transportation demand created by VMT reductions can be absorbed by car pools. Private automobiles, which are designed to carry four to six persons, carry an average of one and one-half persons per trip in major urban areas, and thus represent the largest unused pool of transportation capacity currently available. The Administrator cannot directly require the use of car pools. It can be expected, however, that as measures to make the use of private automobiles less convenient are imposed, increased reliance on car pools will develop naturally as a matter of private initiative.

VMT reduction measures which the Administrator may propose will vary according to the pollution problem of the individual region. Three major control measures appear to be particularly effective for VMT reduction. The first is the use of parking restrictions in central business districts (CBD). In addition to helping solve the problem of localized carbon monoxide pollution in these areas, as noted above, such measures can be expected to discourage auto trips to CBD's by making it more difficult to park the car at the end of the trip, and thus encouraging a shift to alternate modes of transportation. The second is the conversion of one or more lanes of freeways and major streets to the exclusive use of buses or car pools or both. This can be expected to encourage the use of the favored modes of transportation by reducing traveltimes and to discourage the use

of private automobiles by reducing the amount of road space available to them. The third is the imposition of gasoline supply limitation which might be no more than a limit on the growth in gasoline consumption. This can be expected to further reduce VMT. In some regions, this will be made necessary by the legal requirement to propose a plan theoretically capable of meeting the standards by 1975, or by 1977 at the latest.

#### TRAFFIC FLOW IMPROVEMENTS

In central business districts, traffic speeds are low during most of the day. Various traffic flow improvement measures, including operational improvements of existing roads, have been proposed by many States on the basis that the resulting higher traffic speeds will substantially reduce pollutant emissions.

There are indications that the resulting improvement in air quality will be short-lived, since street improvements tend to induce additional traffic. With higher traffic volumes, total emissions would increase. Within a year or two the emissions may in fact be at higher levels than if the traffic flow improvement measures had not been implemented at all.

It may be possible in some areas to counteract the induced traffic by appropriate measures; but, in general, the States have not addressed themselves directly to this problem. Where the States have considered and proposed such countermeasures, they have been proposed as separate control measures for which additional emission reductions have been claimed. The Administrator recognizes that it is not easy to solve the problem of induced traffic; however, failure to recognize the problem gives a false picture of the results of the traffic flow improvements, and failure to identify the major elements of the problem could result in inadequate monitoring and in inadequate planning of counter and contingency measures.

#### INSPECTION/MAINTENANCE

Pollutant emissions from in-use vehicles can be reduced by ensuring that engines and emission control devices are maintained in good operating condition. Such reductions can be achieved through periodic inspections of in-use vehicles and the repair of vehicles that fail to meet inspection standards. The degree of emission reduction obtained will depend on the frequency of inspection and the particular inspection standards used. The total emission reduction achievable through a particular inspection measure will be accomplished only after the vehicles in a particular area have completed the inspection/maintenance cycle.

States have proposed three principal types of annual inspection programs: Idle emission tests, loaded emission tests, and inspection and maintenance. The Administrator has evaluated the feasibility of these systems and the time generally required to implement the measures and complete one inspection cycle. An idle-test program (i.e., tests with transmissions in neutral) can be fully implemented by May 31, 1975. A loaded-test program (i.e., tests with the vehicle placed on a dynamometer which is programmed to simulate the actual driving conditions) leads to somewhat greater emission reductions, but, due to the equipment needed, may require up to 6 additional months for implementation (December 1, 1975). The implementation completion dates for these tests are subject to adjustment based on an evaluation of results from current programs, and availability of facilities for safety inspection, and licensed garages.

The Administrator does not currently believe that implementation of heavy-duty vehicle maintenance/inspection programs can be assured, even by 1977. Currently a successful inspection/maintenance approach for heavy-duty vehicles has not been identified. Accordingly, provisions for heavy-duty vehicle inspection/maintenance have only been considered acceptable in the New York City transportation control plan in view of the city's

continuing program to develop and test heavy-duty retrofits.

Most States have not yet developed detailed plans for implementation of inspection/maintenance programs. Implementation will require obtaining the necessary legal authority; promulgating the required regulations specifying appropriate emission or other performance standards and testing procedures; training garage mechanics; licensing garages where necessary or appropriate; and training the State's supervisory manpower.

#### RETROFIT CONTROL SYSTEMS

Some States have proposed that retrofit emission control systems be required for light- and/or heavy-duty vehicles registered in those areas of the State having pollution that significantly affects a particular air quality control region. The retrofit devices which have been proposed include vacuum spark advance disconnect (VSAD), air bleed, catalysts, and heavy duty retrofit catalysts.

These devices are currently in various stages of development and use. For any retrofit strategy to be effectively implemented, the affected State must insure that the devices are in fact capable of achieving the claimed emission reductions; that the devices do not adversely affect the safety of the automobile; that the devices will be available in sufficient quantity at convenient places; that there are sufficient trained mechanics; that the devices are being properly installed; and, in the case of catalytic devices, that leaded gasoline will not be used and that sufficient quantities of unleaded gasoline of appropriate octane number will be available. These are not easy tasks, and the States that have proposed retrofit strategies may have difficulty implementing their programs.

In light of these difficulties, the Administrator has extensively evaluated the minimum time frame which would be generally required to complete the implementation of the particular retrofit strategies. As a result of this evaluation, the Administrator determined that vacuum spark disconnect strategies could be implemented by

May 31, 1975, but that implementation of an air bleed control strategy could not be accomplished before May 31, 1976, or light-duty catalytic retrofit strategies before May 31, 1977. It was further determined that implementation of the heavy-duty catalytic retrofit program cannot be assured, even by May 31, 1977. The general implementation time frame determinations noted above are reflected in the agency's approval/disapproval decisions.

The Administrator, however, also considered the regions' particular ability to implement a designated strategy. For example, the heavy-duty catalytic retrofit strategy was approved for the plan submitted by the State of New York for New York City. The approval was based upon the existence of the city's ongoing program to develop heavy-duty catalytic retrofit devices.

In general, retrofit systems that are capable of high reductions in emissions also involve higher costs, including both installed cost and operating cost. Since a retrofit program would involve large numbers of vehicles, the total cost of such a program can be expected to be large. Accordingly, the Administrator, in his regulation pertaining to the preparation, adoption, and submittal of implementation plans (40 CFR 51.2), has encouraged the States to consider the socio-economic effects which may accompany retrofit control strategies.

#### ECONOMIC AND SOCIAL IMPACT

The regulations promulgated by the Administrator in August 1971, setting forth the requirements for preparation, adoption, and submittal of State implementation plans included a stipulation that the requirements should not be construed "to encourage a State to prepare, adopt, or submit a plan without taking into consideration the social and economic impact of the control strategy set forth in such plan \* \* \*". In this context, an assessment of the economic and social impacts of the transportation control strategies proposed by the States is being completed.

Each element of a transportation control strategy involves commitments of manpower, facilities, equipment, and material which involve direct costs that can be quantified and budgeted. It should be noted that private citizens, especially the car-owning population, will probably be more directly affected (in terms of cost) by these control measures than by typical stationary source control measures.

There are also social impacts which occur as a result of the implementation of transportation control measures. These impacts take the form of non-monetary costs attributed to control measures, such as inconvenience and loss of time and opportunity. Control measures which affect personal mobility, choice of travel mode, and regional accessibility also induce monetary social costs, although quantification of these costs is difficult.

Society will be affected by the implementation of transportation control measures in several specific ways. An individual will incur direct personal costs when bringing his vehicle into compliance with specific strategies. A decrease in or inhibition of the mobility of the individual may affect employment and retail business operations and sales, as well as recreational activities and facilities. Public service and enforcement activities will require expanded capabilities and resources as a result of implementation of the transportation control strategies. In addition, there will be measurable impacts on raw materials and natural resources, such as the energy supply.

The most significant impact, however, will result from measures which directly affect the individual's mobility and life style and necessitate changes in the economic structure of the community. The severity of this impact in each urban area depends on the degree and magnitude of the control measures proposed; the extent to which vehicle usage is restricted; the manner in which direct costs of abatement are financed; and the degree to which incentives are provided to ameliorate the effects of the control measures.

#### EXTENSION REQUESTS

Section 110(e) of the Clean Air Act provides that an extension of up to 2 years in the time allotted a State for achieving any given primary standard in any air quality control region may be granted only if the Governor of a State requests it and establishes the following to the satisfaction of EPA: (1) He must have presented a plan which is theoretically able to achieve the standards by the 1975 deadline; (2) he must show that certain elements of the control strategies necessary to control certain sources will not be available by 1975; (3) he must show that there are no alternatives to those essential elements in (2) above that will not be available by 1975; (4) he must demonstrate that the plan provides for the application, as soon as is practicable, of all reasonably available measures for reducing emissions from these sources; and (5) he must show that all strategies in the plan for the control of other sources will be applied by May 31, 1975. The January 31, 1973, Court of Appeals decision placed particular stress on the requirement for a careful examination of extension requests. An extension, if granted, applies only to those specific measures for which more time is required. All other measures in the plan must be fully implemented by May 31, 1975, or sooner as provided in the plan.

If the State has not met the conditions of section 110(e), the Administrator must disapprove the extension request and propose a substitute plan. If it becomes apparent either that the original denial was in error or that the best achievable plan still will not meet the standards in 1975, the Environmental Protection Agency may grant itself an extension of time, if justified by the facts, up to a 2-year maximum. In granting itself the extension, the Environmental Protection Agency is bound by the same legal standards as those that apply to State requests. In particular, no such extension will be legally valid unless the requirements of section 110(e) have been met.

### PUBLIC HEARINGS AND COMMENTS

All States were required, prior to the adoption of any plan or revision thereof, to conduct one or more public hearings on such plan, compliance schedule, or revision. Notice of a public hearing was to be given at least 30 days prior to the date of such hearing. Notice was to be given by prominent advertisement, in the region affected, of the date, time, and place of such hearing. The proposed plan or revision was to be available for public inspection at the time of announcement of the notice.

Comments were received from the general public, private industry and such organizations as Natural Resources Defense Council. Typical comments were as follows: (1) Plans did not provide necessary assurance that the State will furnish the required resources to implement the control strategies; (2) plans did not provide an adequate description of the enforcement methods, administrative procedures, monitoring systems, and surveillance programs necessary for plan implementation; (3) plans made unjustified and legally insufficient request for extensions of the deadline for attainment of the primary standards; and (4) plans did not make provision for intergovernmental cooperation in the implementation of a strategy.

These and other comments are addressed in the preamble to the specific State plans and in the evaluation reports written for each State plan.

### FUTURE STATE ACTION REQUIRED

As indicated in the March 20, 1973, notice, the complete formulation of transportation control strategies requires three steps. The first step was completed with submittal on April 15, 1973, the State control strategies, as defined in 40 CFR 51.1(n), which are proposed to be put into effect on a specified timetable. A listing of possible transportation control strategies does not meet this requirement, even if it is coupled with general assurances that one or more of the measures described will be put into effect if necessary. To be acceptable, a plan must make choices and indicate specifically what will be

done. In addition, a plan must contain the specified air quality data and projections of strategy impact, and must meet other requirements of part 51.

Second, States must submit evidence that they will possess the legal authority by July 30, 1973, required to carry out the plan. In those instances where the legislature is still in session, or where the Governor has indicated he will call a special session of the legislature to consider transportation controls, transportation strategies may be approved this date regarding the requirements of § 51.11 (a), (c), (d), (e), and (f) calling for legal authority, since the Agency has previously stated that necessary legislative authority may be submitted by July 30, 1973. To the extent that legal authority is not shown to be available at that time, the affected elements of the plans will be disapproved, and the Administrator will promulgate substitute provisions unless the State can show that the authority is not currently needed, that it will be obtained before it is needed, and that no loss of time in meeting the standards will result from waiting to obtain it.

Detailed regulations for implementing the control strategy must be adopted by December 30, 1973. This does not defer the necessity for the States to choose their strategies and make firm commitments to put them into effect. It merely means that the detailed procedures involved can be approved later. If the plan did not provide adequate assurance that this later stage would be essentially procedural, so that substantial difficulties would not be likely to arise then, the plan was not approved.

### FEDERAL MOTOR VEHICLE EMISSION PROGRAM

The April 11, 1973, decision of the Administrator (38 FR 10317) granting certain suspensions of the 1975 auto emission standards to the domestic auto manufacturers will, to some degree, affect the transportation control plans. It is estimated that the interim motor vehicle standards specified by the Administrator will increase the vehicle pollutant emissions in 1975 by 2 to 4

percent of that anticipated before the 1-year extension was granted to the automobile manufacturers. Because of the closeness of the date of the Administrator's decision and the April 15, 1973, deadline for plan submittal, only a few of the plans accounted for the effect of the interim standards. For those plans that are found to be inadequate, additional measures will be proposed by the State or the Environmental Protection Agency to compensate for the 1-year extension.

The effects of these and other factors will be kept under continual review and the States will be required, at appropriate times, to suitably revise their plans in accordance with the revision procedures prescribed by the Clean Air Act and 40 CFR 51.6.

#### SUMMARY OF APPROVAL/DISAPPROVAL ACTIONS

The Court of Appeals order required that transportation control plans be submitted by 21 States and the District of Columbia. Though not included in the court order, the Commonwealth of Virginia has also voluntarily submitted a transportation control strategy. Approval/disapproval actions today cover 43 separate air quality control regions or portions of regions found in these 23 jurisdictions. The actions taken in these 43 separate cases have been categorized as shown in the following table. This table identifies Air Quality Control regions (AQCR) or subregions with the name of a key metropolitan area associated with the region. For example, the Northern Alaska intrastate is designated Fairbanks and the Texas portion of the El Paso-Las Cruces-Alamogordo interstate region is designated El Paso.

#### APPROVAL/DISAPPROVAL SUMMARY

	<i>Regions<sup>1</sup></i>
<i>Plans fully approved now:</i>	
Alabama, Birmingham, Mobile .....	2
New York, NYC, Rochester, Syracuse .....	3
	<hr/>
	5
<i>Plans fully approvable after expiration of comment period:</i>	
Kansas, Kansas City .....	1
Louisiana, Baton Rouge .....	1
Missouri, Kansas City .....	1
	<hr/>
	3
	<hr/>
<i>Plans with generally approvable control strategy but procedurally deficient:</i>	8
Arizona, Phoenix .....	
D.C., National Capital .....	
Illinois, Chicago .....	
Oregon, Portland .....	
Pennsylvania, Philadelphia, Pittsburgh .....	
Utah, Salt Lake City .....	
Virginia, National Capital .....	
Washington, Seattle, Spokane .....	
	<hr/>
	10
<i>Plans submitted too late to evaluate:</i>	
Colorado, Denver .....	1
<i>Inadequate plan submitted—significant EPA promulgation anticipated:</i>	
Maryland, National Capital, Baltimore .....	
Texas, El Paso, Austin/Waco, Corpus Christi, Houston/Galveston, San Antonio, Beaumont, Dallas/Fort Worth .....	
	<hr/>
	9

<sup>1</sup> Air Quality Control Region or portion of Region.

## APPROVAL/DISAPPROVAL SUMMARY—Continued

Regions<sup>1</sup>

No plan submitted—Expected in July; significant EPA proposals needed:

California, San Francisco, San Diego, Sacramento, San Joaquin, Indio	
Indiana, Indianapolis	
Massachusetts, Boston, Springfield	
Minnesota, Minneapolis/St. Paul	
New Jersey, Newark, Camden/Trenton	
Ohio, Cincinnati, Dayton, Toledo	
Alaska, Fairbanks	
	15
Total	43

<sup>1</sup> Air Quality Control Region or portion of Region.

A limited number of State plans are being completely approved today. However, the Administrator has approved portions of most plans submitted and recognizes the commitment and extensive effort put forth by many States in the development of these plans. He is confident that many States will correct the deficiencies and have fully approvable plans in the near future. Transportation control plans for Alabama and New York are completely approved. Based on evaluation of recent air quality measurements and updated emission inventories, the plan submissions indicate that control measures currently contained in three of the five regions in these States will achieve the standards by May 31, 1975. These regions are the Metropolitan Birmingham intrastate region in Alabama, the Alabama portion of the Mobile (Alabama)-Pensacola-Panama City (Florida)-Southern Mississippi intrastate region, and the central New York region. The two remaining regions in New York State require transportation controls and have submitted approvable plans. The Genesee-Finger Lakes intrastate region requires transportation controls to achieve the stan-

dards for photochemical oxidants (hydrocarbons) by May 31, 1975. The New York portion of the New Jersey-New York-Connecticut interstate region, which requires extensive transportation controls, has been granted an extension until December 31, 1976, to achieve the standards for photochemical oxidants and carbon monoxide.

The Administrator is required to disapprove three plans today that have not been available for public comment a full 21 days. It should be noted, however, that the Agency currently expects to approve these plans provided changes are not required in response to public comments. The portions of regions covered by these three plans are the Louisiana portion of the southern Louisiana-Southeast Texas interstate region, the Kansas portion of the Metropolitan Kansas City interstate region, and the Missouri portion of the Metropolitan Kansas City interstate region.

Ten plans submitted by eight States and the District of Columbia cannot be fully approvable [sic] today but contain strategies which either will achieve ambient air quality standards or require the addition or modification of several control measures to achieve standards. In some cases, disapproval today results from deficiencies in meeting requirements such as adequate legal and enforcement authority, monitoring and surveillance procedures, and timetables for implementation and enforcement. These plans are the result of extensive efforts by States. The Environmental Protection Agency is continuing to work with each State to revise State plans as necessary for them to be fully approvable.

Colorado recently submitted a detailed plan for Denver. This plan was submitted too late for the Administrator to complete his evaluation. In addition, the plan has not been available for public comment for the required time period. Maryland and Texas submitted plans which are considered to have serious deficiencies in control strategies proposed to meet standards. It is expected that significant control measures will be proposed by the Administrator to make these plans acceptable.

Transportation control plans for 15 regions or portions of regions have been disapproved because no transportation control measures have been submitted by the appropriate States to the Administrator.

A discussion of specific actions relevant to each State is given below.

#### ALABAMA

The State of Alabama was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the standards for carbon monoxide and photochemical oxidants (hydrocarbons) in the Metropolitan Birmingham intrastate region, and for photochemical oxidants (hydrocarbons) in Alabama's portion of the Mobile (Alabama)-Pensacola-Panama City (Florida)-Southern Mississippi interstate region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and Alabama was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975. On April 24, 1973, the State of Alabama submitted a nonregulatory plan revision. This revision was reviewed and evaluated by the Administrator pursuant to 40 CFR part 51. It has been determined after review that the revision submitted adequately insures that the Alabama plan meets the requirements of section 110. A summary of this review is contained in "Evaluation Report on the Transportation Control Study for the State of Alabama," which is available both at the Freedom of Information Center, EPA, room 329 401 M Street SW., Washington, D.C. 20460, and at the Office of Public Affairs, EPA Region IV, 1421 Peachtree Street NE., Atlanta, Ga. 30309.

The approved implementation plan provisions were adopted in accordance with procedural requirements of State and Federal law. No public hearings on this revision were held by the State of Alabama. However, since the revision submitted was a nonregulatory revision, no hearing was required under 40 CFR 51.6. There were two respondents to the *FEDERAL REGISTER* of May

4, 1973 (39 FR 11113), "Notice of Opportunity for Public Comment on Proposed Transportation and/or Land Use Control Strategies." A major petroleum company commented on gasoline-loading requirements already adopted by the State of Alabama. The Natural Resources Defense Council challenged as inflated the Alabama figures indicating that the standards would be achieved on schedule without transportation controls through the increasing stringency of controls on new cars. Although, as noted in the evaluation report, EPA has not accepted the State figures in full, the figures even as adjusted indicate in our best judgment that the standards will be met on schedule.

#### ALASKA

In accordance with *NRDC v. EPA*, Alaska was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the carbon monoxide standards in the Northern Alaska intrastate region by May 31, 1975.

The State of Alaska has neither held public hearings to consider alternate transportation and land use control strategies as part of their implementation plan for the region, nor has the State indicated that it will submit a plan in compliance with the March 20 *FEDERAL REGISTER* requirements.

As a result of Alaska's unresponsiveness to the Administrator's order of March 20, 1973, the Administrator must at this time indicate that deficiency and list the resultant exemptions [sic] to the approvability of the Alaska plan for the Northern Alaska intrastate region.

Should the State of Alaska submit its required plan, the Environmental Protection Agency will acknowledge formal receipt of the plan through the *FEDERAL REGISTER* and will provide an opportunity for the public to comment on the plan. All comments submitted will be considered in the plan review. The Environmental Protection Agency will then revise this disapproval notice as is deemed appropriate.

## ARIZONA

The State of Arizona was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment and maintenance of the carbon monoxide standards in the Phoenix-Tucson intrastate region.

In accordance with *NRDC v. Environmental Protection Agency*, this extension was rescinded, and Arizona was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975. In addition, Arizona was directed to submit a transportation strategy for photochemical oxidants (hydrocarbons) for the Phoenix-Tucson intrastate region.

The State of Arizona held a public hearing on the proposed plan on January 25, 1973. At this hearing 27 persons testified, including representatives of 9 conservation groups and 3 industries. General support and endorsement were voiced for inspection/maintenance and retrofit as immediate solutions, but most testimony indicated that these strategies would be inadequate as permanent solutions. There was general support for long-term strategies such as mass transit, controlled growth, and land-use planning.

EPA received the plan on April 11, 1973, and published notice of its arrival in the *FEDERAL REGISTER*, 38 FR 10119 (Apr. 24, 1973), and invited comments.

One comment submitted criticized the use of a limited data base and lack of contingency measures in the plan and objected to the high cost of retrofits. Comments received from three oil companies also objected to catalytic retrofits. In addition, the Natural Resources Defense Council submitted comments that challenged as too high the estimates of emission reductions to be achieved from retrofit and the establishment of an inspection and maintenance system; the general lack of regulatory language and choice of strategies; and the absence of VMT reduction measures. The feasibility of the proposed retrofit program was also questioned.

After reviewing the plan, the Administrator concluded that, if only the emission control on bulk tank farms and service station underground storage tanks were implemented as proposed, the national standards for photochemical oxidants could be attained by May 31, 1975, but that a 39-percent VMT reduction in addition to all the proposed strategies would be required in order to attain the standards for carbon monoxide by the 1975 deadline. However, the State's implementation dates for several of the proposed strategies are not acceptable.

The Administrator has determined that catalytic retrofits cannot be fully implemented before mid-1977, and that air-bleed retrofits cannot be fully implemented before mid-1976. In the State plan it was indicated that the proposed loaded inspection system cannot be fully implemented before mid-1976, even though the State already has an ongoing program established. EPA agrees with this assessment. Therefore, although these strategies are technically feasible, the Administrator cannot approve them for the Arizona plan because they will not be available to the State for use in attaining the national standards by May 31, 1975. In addition, the proposed retrofit and inspection strategies for heavy duty vehicles cannot be approved because these strategies are not considered implementable even by mid-1977.

A request by the Governor for an 18-month extension for both pollutants was included with Arizona's plan. However, the State failed to satisfy the justification criteria published in the *FEDERAL REGISTER* (36 FR 15493) for extension requests, namely, the plan contains no VMT reduction measures to be implemented during the extension period. In the judgment of the Administrator, sufficient alternative transportation capacity is presently or potentially available to achieve a 10- to 15-percent VMT reduction by 1975. Therefore, the Administrator cannot grant the extension. Nevertheless, it should be noted that, based on the above determinations, an 18-month extension would not be sufficient for implementing all the strategies needed for attainment of the standards.

The Administrator recognizes the sincere efforts of Arizona to develop technically sound and workable transportation control strategies. In order to realize its objective, the Administrator encourages the State to investigate the availability of strategies other than those involving heavy duty vehicles, and to submit an adequately documented justification for an extension of the attainment dates for the carbon monoxide standards.

#### CALIFORNIA

The State of California was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the standards for oxidants (hydrocarbons) in the San Francisco Bay Area, Sacramento Valley, and Southeast Desert intrastate region, and for carbon monoxide in the Sacramento Valley intrastate region.

In accordance with *NRDC v. EPA*, this extension was rescinded and California was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

In addition, California was directed to submit a transportation strategy for photochemical oxidants (hydrocarbons) in the San Diego and San Joaquin Valley intrastate region and for carbon monoxide in the San Francisco Bay Area, San Diego, and San Joaquin Valley intrastate region. This directive did not include the Metropolitan Los Angeles intrastate region, which was already the subject of separate EPA rulemaking at that time.

Because the court order handed down in *NRDC v. EPA* required the Administrator to approve or disapprove State plans within 2 months after the date required for the submission of the plan, the Administrator is disapproving those portions of the California plan that were required to be submitted pursuant to paragraph 3 of the court order. This disapproval is based solely upon the lack of timely submittal of California's plan. The Environmental Protection Agency will, when the plan is

received, acknowledge its receipt in the FEDERAL REGISTER, and will provide an opportunity for the public to comment on the plan. After evaluation of the plan that is to be submitted by California, and consideration of all comments, this notice will be revised accordingly.

#### COLORADO

The State of Colorado was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the standards for photochemical oxidants and carbon monoxide in the Metropolitan Denver Intrastate Region. In accordance with *NRDC v. EPA*, this extension was rescinded, and Colorado was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975. The State of Colorado held public hearings on its plan on January 19, 1973, and ultimately submitted the plan on May 31, 1973.

The court order required the Administrator to approve or disapprove State plans within 2 months after the date required for submission of a plan. Further, the Administrator must provide a period for public comment after receiving the plan and prior to publication of approval/disapproval notice in the FEDERAL REGISTER. Accordingly, the Administrator must disapprove those portions of the Colorado plan that were required to be submitted pursuant to paragraph 3 of the court order. This disapproval is based solely upon lack of timely submittal of the required plan and is not meant to reflect on the content of the submitted plan.

The Environmental Protection Agency has acknowledged in the FEDERAL REGISTER receipt of the plan and is now providing an opportunity for the public to comment on this plan. All comments submitted by the public on the Colorado State plan will be considered. After considering the plan submitted by the State and all public comments, including the hearing transcript, the Environmental Protection Agency will take such final action as appropriate to approve all portions of the plan

submitted by Colorado that are approvable and promulgate Federal regulations for the remainder.

#### DISTRICT OF COLUMBIA

In accordance with *NRDC v. EPA*, the District of Columbia was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the photochemical oxidants and carbon monoxide standards in the District of Columbia portion of the National Capital interstate region by May 31, 1975.

In order to develop a comprehensive plan for the National Capital interstate region, the District of Columbia revised and updated its original implementation plan to reflect the recommendations of the National Capital Interstate Air Quality Planning Committee. This committee is composed of representatives from the District of Columbia, the State of Maryland, and the Commonwealth of Virginia, including local jurisdictions. The committee was formed by an administrative agreement among Virginia, Maryland, the District of Columbia, and the Metropolitan Washington Council of Governments, and received a funding grant under section 106 of the Clean Air Act for the prime purpose of developing a region-wide transportation plan.

The District of Columbia held public hearings on February 12 and 13, 1973. Statements were presented by representatives of commerce, industry, and citizen environmental groups. Substantial support was evidenced for land use controls, staggered work hours, carpool incentives, "bike-ways," restrictions on free employee parking facilities, and an expanded commuter rail system. Business representatives objected to parking surcharges and the proposed ban on day-time deliveries by heavy-duty gasoline-powered trucks.

Upon receipt of the District of Columbia plan, EPA published notice of its arrival in the **FEDERAL REGISTER**, 38 FR 11114 (May 4, 1973), and invited comments. Comments were received from industry, public environmental organizations, chambers of commerce, govern-

mental organizations, and private individuals. The written comments reflected strong objections to peak-hour delivery bans, the parking surcharge, and the retrofit of gasoline service stations; evidenced substantial concern regarding the technical feasibility and safety implications of the proposed curtailment of aircraft taxing [sic]; and urged region-wide implementation of the plan. Receipt of the written comments was acknowledged by letters from the Regional Administrators to the commenting sources.

The comments submitted by the Natural Resources Defense Council deserve special mention. These comments challenged as too low the air quality baseline data used by EPA. They urged that the air quality monitoring system proposed by the District of Columbia be increased, and called for a commitment to implementation of a VMT surveillance system. They also urged that a more comprehensive system of vehicle restraints and VMT reduction measures be established. In addition, NRDC stated that a uniform plan for the entire air quality control region must be adopted, and expressed doubts as to the feasibility of the proposed retrofit program. Finally, NRDC stated that legal authority, regulations, timetables for implementation, adequate resources, and enforcement responsibilities and procedures were lacking in the case of certain strategies.

The plan proposed by the District of Columbia includes a broad spectrum of control measures for both mobile and stationary sources, which, if they can be fully implemented, could achieve the primary air quality standards for photochemical oxidants and carbon monoxide by May 31, 1975. Moreover, interim measures are proposed that could be implemented in the event that some of the primary measures are not available by May 31, 1975. However, the absence of proposed regulations and specific procedures for enforcement and administration of portions of the plan, plus the improbable availability or full implementation of several proposed control measures by May 31, 1975, preclude full approval of the plan.

Although no extension was requested, the Administrator is currently of the opinion that the long lead-time required for the principal control measure (catalytic converters) may well make it impossible to achieve national ambient air quality standards by May 31, 1975. Therefore, the Environmental Protection Agency proposes to promulgate a uniform plan that will reflect both the comprehensiveness of the control measures proposed by the District of Columbia and realistic lead-time constraints.

#### ILLINOIS

In accordance with *NRDC v. EPA*, Illinois was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the carbon monoxide standards in the Illinois portion of the Metropolitan Chicago interstate region by May 31, 1975.

The Illinois Environmental Protection Agency held public hearings on April 5 and 6, 1973, on its proposal for a transportation plan. This plan was subsequently submitted to the Administrator on April 17, 1973. Receipt was acknowledged in the April 27, 1973, *FEDERAL REGISTER*, along with a statement that EPA would consider additional comments submitted by the public. A comment from the Clean Air Coordinating Committee of Chicago, Ill., objected to this plan for the following reasons, among others:

(A) Failure to utilize current State procedures in adopting this plan, and

(B) Lack of requisite legal authority for implementation.

Based on an examination of applicable State and Federal law, procedures, and precedents (including the original State implementation plan adoption and submittal), the Administrator has determined that the State of Illinois has not adopted a transportation plan for submission to the Administrator, as required. It was found under sections 4 and 5 of the Illinois Environmental Protection Act that the authority to propose and determine

the necessary transportation strategies does not reside unilaterally with the Illinois Environmental Protection Agency.

The Administrator, however, has examined this proposed plan, together with the entire hearing record of the State, and has determined that the proposed plan, had it met the requirements for adoption, would not have provided strategies that have the total capacity for attaining and maintaining the national standards for carbon monoxide. These proposed strategies were the Federal motor vehicle control program, which affects all gasoline-powered vehicles in the region; the Chicago motor vehicle emission inspection program, which affects vehicles in the city of Chicago; and the enforcement of parking restrictions on one side of one-way streets, which will only affect the Chicago central business district. Environmental Protection Agency calculations show that the strategies presented in this proposed plan would result in a total of 44-percent reduction in carbon monoxide emissions in the Chicago central business district instead of the necessary 50-percent reduction, based on measured air quality data reflected in the State's submission. A more detailed review by EPA of this proposed plan will be provided to the State. Copies of this evaluation report will be available for public inspection at the Environmental Protection Agency, region V, 1 North Wacker Drive, Chicago, Ill. 60606, and at the Office of Public Affairs, Environmental Protection Agency, 401 M Street S.W., Washington, D.C. 20460.

A proposed EPA regulation setting forth a plan to attain and maintain the CO standards in the Illinois portion of the Metropolitan Chicago interstate region will be published shortly in the *FEDERAL REGISTER* and will provide an opportunity for the public to comment on the proposed plan.

#### INDIANA

The State of Indiana was granted, pursuant to section 110(e) of the act, an extension of 2 years from the attainment of the photochemical oxidant (hydrocarbon)

and carbon monoxide standards in the Metropolitan Indianapolis intrastate region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and Indiana was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

The State of Indiana held public hearings on proposed revisions to its plan for the Metropolitan Indianapolis intrastate region on April 9, 1973. On this date, the State indicated that the proposed plan was adequate to attain and maintain the air quality standards by May 31, 1975, with no application of additional controls for mobile or stationary sources. The Indiana SIP as originally submitted based its need for an extension for attainment of the CO standards upon the fact that a 28-percent reduction in CO emission would be achieved while a 45-percent reduction was needed. The 45-percent emission reduction was calculated using 16.3 parts per million 8-hour concentration as the second highest concentration. A reanalysis indicates that this was not the true second highest concentration because the 8 hours in which it was measured overlapped by 7 hours the period in which the highest concentration was measured. The second highest 8-hour concentration, which did not include any of the time period in which the highest concentration was measured, was 12.1 parts per million and occurred twice, September 7 and July 6, 1971. It has not been equaled since that time. This concentration of 12.1 parts per million would indicate that 25.6 percent reduction in CO emissions would be sufficient to attain the standards.

It was pointed out at the hearing that the air quality standard for photochemical oxidants was not exceeded once during the calendar year of 1972. The original Indiana plan with its need for an extension was based upon the second highest 1-hour average photochemical oxidant measurement of 0.13 parts per million recorded in 1971. There was no apparent opposition to the State's implied intent to neither propose any additional strategies nor

request an extension for attaining the photochemical oxidant ambient air quality standard by 1975. However, at that time, the EPA region V office requested that the proposed plan provide an explanation regarding the reduction of measured photochemical oxidant concentrations between the years 1971 and 1972.

The State has not formally submitted its plan to date. Because the court order requires the Administrator to approve or disapprove State plans within 2 months after the date required for submission of a plan, the Administrator is disapproving those portions of the Indiana plan that were required to be submitted pursuant to paragraph 3 of the court order. This disapproval is solely based upon the lack of timely submittal of the required plan and is not meant to reflect on the content of an expected late submittal. A proposed EPA plan will be published soon for comment.

The Governor of Indiana is expected to submit the plan in the near future. When the plan is received, the Environmental Protection Agency will acknowledge, in the **FEDERAL REGISTER**, receipt of the plan and will provide an opportunity for the public to comment on this plan. All comments submitted by the public on both the EPA proposal and the anticipated Indiana State plan will be considered. After considering the plan submitted by the State of Indiana and all comments, the Environmental Protection Agency will take such final action as appropriate to approve all portions of any plan submitted by Indiana that are approvable and promulgate Federal regulations for the balance.

#### KANSAS

The State of Kansas was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the carbon monoxide standards in the Kansas portion of the Metropolitan Kansas City interstate region.

In accordance with *NRDC v. EPA*, this extension was rescinded and Kansas was directed to submit a trans-

portation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

The Kansas Board of Health in conjunction with the State of Missouri held a public hearing on April 12, 1973, during which alternative transportation control strategies were considered. Subsequent to that hearing, Kansas submitted a non-regulatory plan revision that utilized a lower air quality base value for computing the required degree of control to meet the air quality standards by May 31, 1975. The State indicated that the Federal motor vehicle control program plus stationary source control of carbon monoxide would be sufficient to provide the required emission reductions and would thus obviate the need for a transportation and/or land use control strategy. Because of the late submission of the plan revision, the Administrator has not had adequate time to evaluate public comments on the approvability of such revisions. Hence, as required by the January 31, 1973, court order, the Administrator is today disapproving those portions of the Kansas implementation plan that were to be addressed.

After the period for opportunity for public comment on the plan closes, all comments submitted by the public will be considered in the plan review. The Environmental Protection Agency will then revise this disapproval notice as is deemed appropriate.

#### LOUISIANA

The State of Louisiana was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the photochemical oxidant (hydrocarbon) standards in the Louisiana portion of the southern Louisiana-southeast Texas interstate region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and Louisiana was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

On March 30, 1973, Louisiana submitted implementation plan revisions that consisted of controls for hydrocarbon emissions from stationary sources (regulations 22.8 and A 22.8), emission inventory changes, and an updated control strategy. These revisions indicated that the national standards for photochemical oxidants (hydrocarbons) would be attained in Louisiana's portion of the southern Louisiana-southeast Texas interstate region by May 31, 1975. A review of these revisions was conducted by the Administrator, pursuant to 40 CFR, part 51. Submittals by the State must be reported in the *FEDERAL REGISTER*, and a 21-day period set for receipt and analysis of public comment prior to approval/disapproval. Because Louisiana's submittal was not promptly reported, there is insufficient time to analyze and/or include public comment into the approval/disapproval decision by June 15, 1973. When analysis of public comments is completed, this notice will be revised accordingly.

A summary of the Administrator's review based on currently available information is contained in the evaluation report which is available at both the Freedom of Information Center, EPA, room 329, 401 M Street SW., Washington, D.C. 20460, and the Office of Public Affairs, EPA, Region VI, 1600 Patterson Street, suite 1100, Dallas, Tex. 75201.

Public hearings were held by the State of Louisiana on December 28, 1972, to consider the revisions to the State's stationary source controls, and on March 1, 1973, to consider the revised control strategy. The revisions were adopted in accordance with procedural requirements of State and Federal law, which provided for adequate public participation through notice, public hearings, and time for comment. The general consensus of those present at the hearings was that the proposals were satisfactory.

#### MARYLAND

The State of Maryland was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the standards for carbon monoxide in the

Metropolitan Baltimore intrastate region and for photochemical oxidants and carbon monoxide in the Maryland portion of the National Capital interstate region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and Maryland was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

Although neither the May 31, 1972, nor the March 20, 1973, amendments to 40 CFR, part 52 require the submission of a strategy for the attainment and maintenance of national standards for photochemical oxidants (hydrocarbons) in the Metropolitan Baltimore intrastate region, more recent data indicate a serious hydrocarbon problem there. Because more recent data from fully calibrated instrumentation indicated excessive concentrations of photochemical oxidants in the Metropolitan Baltimore intrastate region, the State of Maryland prepared and submitted proposed strategies for both pollutants in both the Metropolitan Baltimore intrastate region and the National Capital interstate region.

The State of Maryland held public hearings on the proposed plans on March 5, 1973, for the National Capital interstate region, and on February 28, 1973, and April 4, 1973, for the Metropolitan Baltimore intrastate region. All sessions were attended by representatives of industry, government, and environmental citizens' groups, and by private citizens. In each case, environmental groups advocated decreased highway construction, all groups supported improved mass transit, and industry representatives objected to bans on heavy-duty truck deliveries and to retrofit of vapor recovery devices.

The Governor of Maryland submitted a plan for the State of Maryland on April 16, 1973, and requested a 2-year extension based on the unavailability of rapid transit, vehicle use control, inspection maintenance system, heavy-duty vehicle retrofit, and service station operation elements. Upon receipt of the plan, EPA published notice of its arrival in the *FEDERAL REGISTER*, 38 FR 10120 (April 24, 1973), and invited comments. Comments were received from industry, public environmental

organizations, chambers of commerce, governmental organizations, and private individuals. Principal comments from these sources reflected the lack of a specific VMT control program, the unavailability of lead-free gasoline, and the economic impracticability of banning new stationary sources. Receipt of the written comments has been acknowledged by letters from the Regional Administrator to the commenting sources.

The comments submitted by the Natural Resources Defense Council deserve special mention. These comments asserted that the reductions claimed for the inspection and maintenance portions of the plan were inadequately supported by data, and that both the stationary source and the inspection and maintenance programs were not described in the required detail. In addition, the failure to include any VMT reduction measures was criticized.

EPA is in agreement with basically all of these comments, and has disapproved portions of the Maryland plan accordingly. These deficiencies also require that Maryland's request for a 2-year extension be denied at this point.

The plan submitted primarily covered the transportation control program in the Metropolitan Baltimore intrastate region. Very limited information was provided for the National Capital interstate region. Thus, evaluation of the latter region is subject to considerable updating when supplementary information is provided by Maryland. It is EPA's understanding that such an update is currently in preparation. Although no assumptions are made concerning future contents of an updated plan, a number of statewide items, such as a motor vehicle inspection program, could apply equally to both of the regions. Consequently, it is deemed reasonable that this evaluation will reflect those items in the current Metropolitan Baltimore plan that would apply to a National Capital plan had it been prepared in a more rigorous manner and in the proper format.

Although the plan submitted contained a broad spectrum of proposed strategies, they were very general and provided little assurance that they are feasible and capable of implementation. In his transmitted correspond-

ence, the Governor of Maryland states his difficulty in proposing a catalytic converter retrofit program. The supplemental information provided with the plan presents reductions attributable to such a program. This has compounded the Administrator's program in determining which emission reduction credits may legitimately be claimed. Further compounding the problem of a sound plan evaluation is the totally inadequate consideration given to various social and economic aspects of proposed strategies.

Because the court order requires the Administrator to approve or disapprove State plans within 2 months after the date required for submission of a plan, the Administrator is approving those portions of the Maryland plan that satisfy the requirements of 40 CFR, part 51, and is disapproving those parts of the plan that are deficient. A proposed EPA plan that remedies these deficiencies will be published soon for comment and will be promulgated on August 15, 1973, as required by the Clean Air Act.

It is expected that the Governor of Maryland will submit additional elements of the proposed plan in the near future. When they are received, EPA will acknowledge, in the FEDERAL REGISTER, receipt of the additions and will provide an opportunity for the public to comment on these additions. After considering the additions submitted by the State of Maryland and all comments, EPA will revise this initial action as appropriate to approve all portions of any plan submitted by Maryland that are approvable and to propose Federal regulations for the remainder.

#### MASSACHUSETTS

The State of Massachusetts was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment and maintenance of the photochemical oxidant (hydrocarbon) and carbon monoxide standards in the Metropolitan Boston intrastate region and the standards for carbon monoxide in the Massachusetts portion of the Hartford-New Haven-Springfield interstate region.

In accordance with *NRDC v. EPA*, this extension was rescinded and Massachusetts was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

As a result of Massachusetts' unresponsiveness to the Administrator's order of March 20, 1973 (38 FR 7323), the Administrator must at this time indicate that deficiency and list the resultant exception to the approvability of the Massachusetts plan for the Metropolitan Boston intrastate region and the Hartford-New Haven-Springfield interstate region.

#### MINNESOTA

The State of Minnesota was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the carbon monoxide standards in the Minneapolis-St. Paul intrastate region.

In accordance with *NRDC v. EPA*, this extension was rescinded and Minnesota was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

The State of Minnesota held a preliminary hearing on the proposed plan on January 16, 1973, and subsequent formal public hearings were held on February 20, 1973, and May 3, 1973. The plan, however, has not yet been submitted to the Administrator. Since the Administrator, because of the court order, must approve or disapprove State plans within 2 months after the required submission date, the Administrator is today disapproving those portions of the Minnesota implementation plan that were required to be submitted pursuant to paragraph 3 of the court order. This disapproval is based solely upon the lack of timely submittal of the plan and an expected late submittal. A proposed EPA plan will be published soon for comment.

The Governor of Minnesota is expected to submit their plan in the near future. When it is received, the Environmental Protection Agency will acknowledge, in the FED-

ERAL REGISTER, receipt of the plan and will provide an opportunity for the public to comment on the plan. All comments submitted by the public on both the EPA proposal and the anticipated Minnesota State plan will be considered. After considering the plan submitted by the State of Minnesota and all comments, the Environmental Protection Agency will take such final action as appropriate to approve all portions of any plan submitted by Minnesota that are approvable and promulgate Federal regulations for the remainder.

#### MISSOURI

The State of Missouri was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the carbon monoxide standards in the Missouri portion of the Metropolitan Kansas City interstate region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and Missouri was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

On May 21, 1973, the State of Missouri submitted a nonregulatory plan revision that utilized a lower air quality base value for computing the required degree of control to meet the air quality standards by May 31, 1975. The State indicated that the Federal motor vehicle control program plus stationary source control of carbon monoxide would be sufficient to provide the required emission reductions and would thus obviate the need for a transportation and/or land use control strategy. Because of the late submission of the plan revision, the Administrator has not had adequate time to evaluate public comments on the approvability of such revisions. Hence, as required by the January 31, 1973, court order, the Administrator is today disapproving those portions of the Missouri implementation plan that were to be addressed.

After the period for opportunity for public comment on the plan closes, all comments submitted by the public will be considered in the plan review. The Environmental Protection Agency will then revise this disapproval notice as is deemed appropriate.

#### NEW JERSEY

On May 31, 1972 (37 FR 10842), the Administrator approved New Jersey's implementation plan for attaining the national ambient air quality standards for carbon monoxide and photochemical oxidants (hydrocarbons). He also granted the 2-year extension requested by the Governor, pursuant to section 110(e) of the Act, for the attainment of the photochemical oxidant (hydrocarbon) and carbon monoxide standards Jersey-New York-Connecticut interstate region and the New Jersey portion of the Region and the New Jersey portion of the Metropolitan Philadelphia interstate region. The basis of New Jersey's 2-year extension was that the Federal motor vehicle control program and the New Jersey motor vehicle inspection program could provide for the attainment of the national standards for carbon monoxide and photochemical oxidants (hydrocarbons) by May 31, 1977, without the imposition of additional transportation control measures that would be difficult to implement. These additional measures would have to be implemented to provide for attainment of the standards by May 31, 1975.

On March 20, 1973 (38 FR 7323), the Administrator, in effect, disapproved the transportation control plan previously submitted by New Jersey on January 26, 1972. Because of the stringent timetable imposed by the court decision, the State of New Jersey was unable to submit a transportation control plan for achieving the national ambient air quality standards for photochemical oxidants and carbon monoxide in both the Metropolitan Philadelphia interstate region and the New Jersey-New York-Connecticut interstate region. However, in an effort to show good faith, the Commissioner of the New Jersey Department of Environmental Protection, acting in behalf of the Governor, sent a letter to the Regional Ad-

ministrator expressing his intent to develop a plan as soon as possible and identifying seven alternative strategies that the State would consider. The most comprehensive strategy presented included the following:

1. Compliance with the Federal motor vehicle control program for new vehicles by 1976.
2. Compliance with the more restrictive inspection/maintenance standards that are expected to reject approximately 45 percent of New Jersey vehicles,
3. Control of stationary sources, and
4. Reduction of vehicle miles traveled during critical seasons of the year by rationing of gasoline to the extent required to achieve a 69 percent reduction in hydrocarbon emissions.

NOTE.—This strategy could be employed singly, or in combination with any of the above strategies.

Because the court order requires the Administrator to approve or disapprove State plans within two months after the date required for submission of a plan, the Administrator is disapproving those portions of the New Jersey plan that were required to be submitted pursuant to paragraph 3 of the court order. This disapproval is solely based upon the lack of timely submittal of the required plan. Should the State of New Jersey submit its required plan, the Environmental Protection Agency will acknowledge formal receipt of the plan through the *FEDERAL REGISTER* and will provide an opportunity for the public to comment on the State plan. All comments submitted will be considered in the plan review. The Environmental Protection Agency will then revise this disapproval notice as is deemed appropriate.

#### NEW YORK

The State of New York was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the photochemical oxidant (hydrocarbon) and carbon monoxide standards in the New York portion of the New Jersey-New York-Connecticut interstate re-

gion, for the carbon monoxide standards in the Central New York intrastate region, and for the photochemical oxidant (hydrocarbon) standard in the Genesee-Finger Lakes intrastate region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and New York was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

The State of New York held public hearings on its proposed plan for their portion of the New Jersey-New York-Connecticut interstate region on April 9, 1973, and for the Genesee-Finger Lakes intrastate region on April 5, 1973. A hearing was held for the Central New York intrastate region on April 4, 1973.

Pursuant to the March 20, 1973 *FEDERAL REGISTER* (38 FR 7323), the State of New York submitted the transportation control strategies for its portion of the New Jersey-New York-Connecticut interstate region on April 17, 1973, and for the Genesee-Finger Lakes intrastate region on April 30, 1973. The nonregulatory revision to the Central New York intrastate region was also submitted on April 30, 1973.

The Administrator has reviewed the control strategies submitted by the State of New York for the above-mentioned regions and has found them to be adequate for attainment and maintenance of the national standards. A summary of the review upon which this determination was made is available at the Public Affairs Office, Environmental Protection Agency, Region II, 26 Federal Plaza, New York, N.Y. 10007, and at the Environmental Protection Agency, Freedom of Information Center, room 329, 401 M Street SW., Washington, D.C. 20460.

The State of New York's Department of Environmental Conservation, as mentioned previously, held a hearing on April 9, 1973, on the State's proposed transportation controls for the attainment and maintenance of the national standards on carbon monoxide and photochemical oxidants (hydrocarbons). A total of 61 people presented oral testimony at the hearing. A number of additional written

statements were submitted at the office of the New York State Department of Environmental Conservation by May 10, 1973. Among those who testified in person were two representatives of County Health agencies, 10 State and local government officials or their representatives, spokesmen for 15 environmental groups, and 10 spokesmen for various industries. The remainder represented a cross-section of transportation and planning groups and private citizens.

A review of the transcript of the hearing indicates that the majority of those who testified gave strong support to the traffic control measures and emphasized the need to implement the strategies providing for improvements in mass transit. On the other hand, a majority of those who discussed specific strategies were strongly opposed to the light-duty vehicle retrofit measures. These included the representatives of the Nassau County Health Department, the Suffolk County Department of Environmental Conservation, the Automobile Club of New York, representatives of the petroleum industry, and a number of environmental groups.

Strategies requiring the imposition of tolls on all East River and Harlem River bridges and the after-hour delivery to offices and stores (originally presented as maintenance strategies) attracted little comment. Firm opposition to the imposition of tolls on the bridges was voiced by three of five government officials who specifically addressed the issue. Several speakers expressed their serious concern as to whether the plan could or would be implemented because it did not adequately address the issues of institutional and economic hindrances to its implementation and enforcement.

A detailed analysis of the hearing record further substantiated the opinion that pervaded the hearing chamber—that the overwhelming majority of those who testified believed that many of the strategies proposed by the State were in the best interests of New York City and should be implemented whether they would provide any significant reductions in ambient concentrations.

The New York Department of Environment Conservation coordinated a public hearing on the proposed transportation control strategies for the Genesee-Finger Lakes intrastate region on April 5, 1973. A review of the transcript indicates that only three people presented testimony that had a direct bearing on the proposed plan. Each of these criticized the measure that requires retrofit on pre-1968 motor vehicles. Specific alternatives were offered. Some of these were the establishment of a standard inspection system and improvement of mass transit.

Upon receipt of the plan, EPA published notice of its arrival in the **FEDERAL REGISTER** (38 FR 10465), April 27, 1973, and invited comments. All comments received related to the New York City area. Comments were received from oil companies, environmental groups, private citizens, and the Automobile Club of New York. The oil companies objected to any requirement for catalytic retrofits, as did the Automobile Club of New York. Other comments called for more VMT reduction, criticized the lack of controls over developments like Battery Park City and the Convention Center, and asked for greater commitment of resources to the clean air effort.

The comments submitted by the Natural Resources Defense Council deserve special mention.

These addressed exclusively the plan for the New York City area, and found three major deficiencies in the measures to be implemented to achieve the standards by 1975, namely a lack of provisions for cooperation with New Jersey, a failure to provide for enough VMT reduction, and vagueness in the regulatory proposals.

As the latter indicates, however, the lack of intergovernmental cooperation stems from a failure on New Jersey's part, not New York's. It is therefore inappropriately addressed under a New York heading.

Contrary to the statement on page 3 of the letter that New York has only adopted a single VMT reduction measure—parking restrictions—New York will also implement a system of bus-only commuter lanes, a ban on taxi cruising, a ban on mid-day truck deliveries, and raising tolls on certain bridges. In addition, the reduc-

tion in parking spaces to which NRDC alludes, is to be on the order of 30 to 50 percent.

There can be no question but that New York plan provides for substantial VMT reduction. Given this, EPA has concluded that New York was justified in concluding that even more would not be available by 1975. The Clean Air Act contemplates that States will be the initial judges of what measures to use to improve air quality. If significant measures that result in substantial VMT reductions are provided, then EPA will not interfere with the measures the State has chosen.

Included with the implementation plan revision submitted by New York was a request by the Governor for a 2-year extension of attainment of the national ambient air quality standard for photochemical oxidants in the New York City area, and 18-month extensions for the achievement of the national ambient air quality standards for carbon monoxide in the New York City area, and for achievement of the national ambient air quality standard for photochemical oxidants in the Genesee-Finger Lakes region.

This extension request was based on the assumption that the retrofitting of passenger vehicles with catalytic emission control devices was not technically feasible. The Governor also questioned the reliability of the devices, the capability to produce and install the needed devices within the needed time frame, and the petroleum industry's capacity to produce the needed quantity of lead-free gasoline.

Analysis of the strategies including the Federal motor vehicle control program, a statewide emission inspection and maintenance program, and stationary source controls shows that these will provide sufficient reductions in hydrocarbon emissions to ensure the attainment of the national standard for photochemical oxidants in the Genesee-Finger Lakes region by 1975. Thus, the Governor's request for an extension until the end of 1976 in the attainment date to achieve the national standard for photochemical oxidants in the Genesee-Finger Lakes region, is disapproved.

Nineteen-month extensions were granted for attainment of the national standards for carbon monoxide and photochemical oxidants in the New York City area.

#### OHIO

The State of Ohio was granted, pursuant to section 110 (e) of the act, an extension of 2 years for the attainment of the photochemical oxidant (hydrocarbon) standards in the Metropolitan Dayton intrastate region, the Metropolitan Cincinnati interstate region, and the Metropolitan Toledo interstate region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and Ohio was directed to submit a transportation strategy by April 15, 1973, that would provide for attainment and maintenance of the standards as noted above by May 31, 1975.

The State of Ohio held public hearings on the proposed plan for the Metropolitan Dayton intrastate region on May 17, 1973, and for the Metropolitan Cincinnati interstate and Metropolitan Toledo interstate regions on May 29 and 30, 1973, respectively. These plans, however, have not yet been submitted to the Administrator.

Because the court order requires the Administrator to approve or disapprove State plans within 2 months after the date required for submission of a plan, the Administrator is disapproving those portions of the Ohio plan that were required to be submitted pursuant to paragraph 3 of the court order. This disapproval is solely based upon the lack of timely submittal of the required plan, and is not meant to have any reflection upon the content of any submitted revisions. A proposed EPA plan will soon be published for comment.

The Governor of Ohio is expected to submit the revised plan in the near future. When it is received, the Environmental Protection Agency will acknowledge, in the FEDERAL REGISTER, receipt of the plan and will provide an opportunity for the public to comment on this plan. All comments submitted by the public on both the EPA proposal and the anticipated Ohio State plan will

be considered. After considering the plan submitted by the State of Ohio and all comments, the Environmental Protection Agency will take such final action as appropriate to approve all portions of any plan submitted by Ohio that are approvable and promulgate Federal regulations for the remainder.

#### OREGON

On October 26, 1972, the State of Oregon submitted to EPA a transportation control strategy to attain the national standards for carbon monoxide and photochemical oxidants by May 31, 1975, in the Oregon portion of the Portland interstate region. On December 20, 1972, the State was notified by EPA of certain deficiencies to be corrected in the submitted plan before it could be approved by EPA.

In accordance with *NRDC v. EPA*, Oregon was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment of the photochemical oxidant (hydrocarbon) and carbon monoxide standards in the Oregon portion of the Portland interstate region.

On April 13, 1973, the State of Oregon transmitted to EPA a transportation control strategy for the Oregon portion of the Portland interstate region. On April 27, 1973, EPA announced receipt of the strategy submitted by the State of Oregon and solicited public comments (38 FR 10466). The comments received in response to the announcement, as well as comments made at the public hearings held by the State of Oregon on March 2 and May 29, 1973, were considered by EPA in evaluating the transportation control strategy adopted by Oregon.

The subject of the March 2 hearing was a proposed regulation designating the four counties where a motor vehicle emission inspection program will be implemented. In the testimony presented at the hearing the only major point of disagreement with the proposed regulation was the geographic scope proposed for the inspection program. Suggestions were made to expand the scope of the inspection program to encompass the entire State or the whole Willamette Valley.

No member of the public appeared to present testimony at the State hearing held on May 29, 1973, to consider adoption of the transportation control strategy for the Portland interstate region. EPA has requested copies of the testimony presented at earlier hearings on the transportation control strategy, held by the State on October 25, 1973, and by the Portland City Council on October 12, 1972. A number of citizen groups and public agencies did participate in the development of the transportation control strategy and did present testimony at the earlier hearings.

Comments were received from the National Resources Defense Council and from two oil companies in response to the FEDERAL REGISTER notice. NRDC criticized as excessive the reductions claimed from the proposed inspection and maintenance system and the replacement of new cars by old. It also called for abandonment of the proposal to replace all eliminated onstreet parking with new offstreet facilities. The oil companies objected to any requirement for catalytic retrofits among other points.

Based on his review of the transportation control plan submitted by the State of Oregon for the Oregon portion of the Portland interstate region and the comments submitted in response to the announcement in 38 FR 10466, the Administrator has found the Oregon submission to be adequate, with certain exceptions, for attainment of national ambient air quality standards. The basis for this determination is contained in an evaluation report available to the public at the library of the Environmental Protection Agency, region X, 1200 Sixth Avenue, Seattle, Wash. 98101, and at the Environmental Protection Agency, Office of Public Affairs, 401 M Street, SW., Washington, D.C. 20460.

#### PENNSYLVANIA

The State of Pennsylvania was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the photochemical oxidant (hydrocarbon) and carbon monoxide standards in the southwest Pennsylvania intrastate region and for the carbon monoxide

standards in the Pennsylvania portion of the Metropolitan Philadelphia interstate region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and Pennsylvania was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

The State of Pennsylvania held public hearings on the Pennsylvania portion of the Metropolitan Philadelphia interstate region and on the southwest Pennsylvania intra-state region on April 5 and 6, 1973, respectively. Attendees at both hearings included representatives of commerce, business, government, and citizen environmental groups, as well as private citizens.

Participants in the Philadelphia hearings voiced strong support for improved mass transit with fringe parking and unified fares; a majority favored the 2-year extension, and several speakers recommended a horsepower surtax and use of highway trust funds for mass transit. The Pittsburgh hearing included numerous presentations by the business community, as well as by government agencies, in which were voiced strong support for mass transit improvements, general support for a statewide inspection system, and substantial opposition to vehicle restraints.

The Governor of Pennsylvania submitted the plan for the State of Pennsylvania on April 13, 1973, and requested a 2-year extension (pollutants not stated) based on public opposition to direct restraints and the unavailability of adequate funding for transit expansion. The plan for the Metropolitan Philadelphia interstate region is based on the assumption that carbon monoxide concentrations in the central business district are 50 percent higher than at the continuous air monitoring project (CAMP) station whose readings provided the approved air quality data base presented in the basic implementation plan submitted on January 27, 1972.

Upon receipt of the plan, EPA published notice of its arrival in the *FEDERAL REGISTER*, 38 FR 10120 (Apr. 24, 1973), and invited comments. Comments were received from industry, public environmental organizations, cham-

bers of commerce, governmental organizations, and private individuals; comments by governmental and environmental organizations emphasized the inadequacy of the plan, and the business community expressed concern over the proposed vehicle restraints.

The comments submitted by the Natural Resources Defense Council deserve special mention. They claimed that, although several promising strategies had been put forth by the State, the plan failed both to state unequivocally that those strategies would be adopted and to support them with the required timetables, designation of enforcement authorities, and draft regulations. The lack of VMT reduction measures was particularly criticized.

Based on his view of the plan, the Administrator has concluded that the proposed adoption of a diagnostic inspection and maintenance system cannot be justified when more effective systems are available to meet the standards. In addition, some of the VMT restraint measures have not been spelled out in the required detail. Finally, the extension request cannot be granted until it is shown that the most effective inspection and maintenance system reasonably available and the most extensive VMT reduction measures reasonably available will be implemented as soon as practicable.

Although Pennsylvania's transportation control plan purports to provide sufficient control measures for achieving the required reductions in carbon monoxide emissions, detailed quantification is lacking, and the proposed improvements, as described in various sections of the plan, are frequently contradictory. Moreover, no consideration whatever is given to hydrocarbon emissions in Pittsburgh, which must be reduced substantially if the primary standard is to be achieved by 1975. In addition, the baseline air quality concentration for Philadelphia differs from the approved lower figure presented in the original implementation plan, and is not substantiated by valid test data. On the basis of information presently available to the Administrator, the Philadelphia air quality concentrations of carbon monoxide are consistent with national averages when viewed from the aspect of traffic density levels. In the event that continued moni-

toring indicates that a higher (worse) air quality baseline exist in Philadelphia, appropriate revisions of the plan will be required. Although supporting computations for a higher air quality baseline were presented in the earlier (Dec. 20, 1972) version of the plan, no such data are included in the final plan as submitted.

Because the court order requires the Administrator to approve or disapprove State plans within 2 months after the date required for submission of a plan, the Administrator is approving those portions of the Pennsylvania plan that satisfy the requirements of 40 CFR, pt. 51, and is disapproving those parts of the plan that are deficient. A proposed EPA plan that remedies these deficiencies will be published soon for comment and will be promulgated on August 15, 1973, as required by the Clean Air Act.

#### TEXAS

The State of Texas was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of the photochemical oxidant (hydrocarbon) standards in the Corpus Christi-Victoria and Metropolitan Houston-Galveston intrastate region.

In accordance with *NRDC v. EPA*, the extension was rescinded, and Texas was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975. In addition, Texas was directed to submit a transportation strategy for photochemical oxidants (hydrocarbons) in the Austin-Waco intrastate region, the Dallas-Fort Worth intrastate region, the San Antonio intrastate region, and the El Paso-Las Cruces-Alamorgordo interstate region.

Prior to adoption of a plan, the State must make principal portions of the plan, including revisions, available to the public, and must provide for a public hearing to receive testimony regarding the proposed plan. The State of Texas held hearings on April 4, 1973, in Dallas, Houston, and San Antonio, Tex. However, the principal portions or revisions in the control strategy were not made

available for public inspection and public comment prior to the hearings. Testimony given at the hearings, as well as written inquiries to the Administrator, substantiate this deficiency. Therefore, it is the opinion of the Administrator that the plan revision submitted by the State of Texas for control of hydrocarbon emissions cannot be considered as having met the minimum requirements of § 51.4.

It has been determined after review that the material submitted by Texas, even if it had been validly adopted, would not adequately insure, except in the Corpus Christi-Victoria intrastate region, that the plan meets the requirements of § 51.14. A summary of this review is contained in "Proposed Control Strategy to Meet Ambient Air Quality Standards for Photochemical Oxidants in Texas," which is available both at the Freedom of Information Center, EPA, room 329, 401 M Street SW., Washington, D.C. 20460, and at the Office of Public Affairs, EPA Region VI, 1600 Patterson Street, Suite 1100, Dallas, Tex. 75201.

The State's control strategy for reducing hydrocarbon emissions in the Corpus Christi-Victoria intrastate region was found to be adequate for attainment of the national standard for photochemical oxidants by May 31, 1975. However, since the State failed to hold adequate public hearings, the Administrator must propose a plan for the region. Upon completion of adequate public hearings by Texas, this notice will be revised accordingly.

Included with the implementation plan revision submitted by Texas was a request by the Governor of Texas for an extension until 1977 for the attainment of the primary standard for photochemical oxidants in all air quality control regions of the State. The Administrator does not consider the justification adequate for granting such extensions.

#### UTAH

The State of Utah was granted, pursuant to section 110(e) of the act, an extension of 2 years for the at-

tainment of the standards for carbon monoxide in the Wasatch Front intrastate region.

In accordance with *NRDC v. EPA*, this extension was rescinded and Utah was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

The State of Utah held a public hearing on March 26, 1973, at which time the revised transportation and land-use control plan was presented to the participants.

The State of Utah submitted the plant to EPA on April 16, 1973. Upon receipt of the plan, EPA published notice of its arrival in the *FEDERAL REGISTER*, 38 FR 10120 (Apr. 24, 1973), and invited comments.

One comment was received from the National Resources Defense Council. It stated that the State had not shown how the strategies proposed would achieve the reductions claimed for them; that they were not supported by the required legal authority, draft regulations, or timetables for implementation; and that the State had failed to adopt any VMT reduction measures, even though the standards would not be achieved without them.

The Administrator has reviewed the control strategies submitted and finds them adequate with the exceptions noted below in the applicable regulations. An evaluation report that provides the rationale for the above determination is available for public inspection at the Office of Public Affairs, Environmental Protection Agency, Region VIII, Lincoln Street, Denver, Colo., and at the Office of Public Affairs, Environmental Protection Agency, 401 M Street SW., Washington, D.C. 20460.

A request for an extension of time for the attainment of the carbon monoxide standard is disapproved at this time because of a lack of sufficient supporting information.

#### VIRGINIA

Although neither the court order nor the March 20, 1973, amendments to 40 CFR part 52 applies directly to Virginia, their application to Maryland impacts on the

National Capital interstate region, thus requiring coordinated action by Virginia and the District of Columbia as well as Maryland. The Virginia plan was coordinated with Maryland and the District of Columbia, and comprises the 1975 attainment plan of the National Capital Interstate Air Quality Planning Committee forwarded to the two Governors and the Mayor-Commissioner on January 31, 1973. The emission inventory and planned reductions are on an interstate regional basis and have not been factored for Virginia's portion of the region.

The State of Virginia held public hearings on the proposed plan for Virginia's portion of the National Capital interstate region. Comments by representatives from government, industry, and citizen groups indicated overwhelming support for improved mass transit, some determined resistance to any controls that could conceivably destroy the auto-dominant life style, and substantial objections to catalytic retrofit, gasoline rationing, and retrofit of vapor recovery devices.

The Governor of Virginia submitted a plan for the State of Virginia on April 11, 1973. The plan is based on the recommendations of the National Capital Interstate Air Quality Planning Committee, and includes a broad spectrum of control measures for both stationary and mobile sources. The Governor requested a 2-year extension based on the unavailability of either catalytic converters or gasoline service station vapor recovery systems for dispensing-pump nozzles by May 31, 1975.

Upon receipt of the plan, EPA published notice of its arrival in the *FEDERAL REGISTER*, 38 FR 10119 (Apr. 24, 1973), and invited public comment. Comments were received from industry, public environmental organizations, chambers of commerce, governmental agencies, and private individuals. Environmental organizations objected to the request for a 2-year extension, industry emphasized the impossibility of installing vapor recovery devices on underground gasoline tanks before 1980, and commercial representatives voiced strong objections to the prohibition of heavy-duty gasoline truck deliveries from 6 a.m. to 6 p.m.

The comments submitted by the Natural Resources Defense Council deserve special mention. They objected to the lack of detailed regulations, to the failure to specify whether an idle test or a loaded test would be selected for the inspection and maintenance program, and to the lack of VMT reduction measures. They suggested that bus supply was not nearly the obstacle to expansion of mass transit facilities by 1975 that Virginia had claimed.

Upon review of the plan, the Administrator has determined that detailed description of and sufficient timetable for implementing VMT reductions and the inspection and maintenance program has not been provided. The proposed parking restrictions also suffer from this deficiency. For these reasons, and because it appears that additional VMT reduction measures may be reasonably available, no extension can be granted at this time.

Consequently, the catalytic retrofit control measure proposed by Virginia cannot be approved because it will not be available to the State in time to contribute to attainment of the standards by mid-1975.

Because the court order requires the Administrator to approve or disapprove State plans within 2 months after the date required for submission of a plan, the Administrator is approving those portions of the Virginia plan that satisfy the requirements of 40 CFR part 51, and is disapproving those parts of the plan that are deficient. A proposed EPA plan that remedies these deficiencies will soon be published for comment, and will be promulgated on August 15, 1973, as required by the Clean Air Act.

#### WASHINGTON

The State of Washington was granted, pursuant to section 110(e) of the act, an extension of 2 years for the attainment of carbon monoxide standards in the Puget Sound intrastate region and the Washington portion of the Eastern Washington-Northern Idaho Interstate Region, and for photochemical oxidant (hydrocarbon) standards in the Puget Sound Intrastate Region.

In accordance with *NRDC v. EPA*, this extension was rescinded, and Washington was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975.

The State of Washington held public hearings on April 11 and 12, 1973, on the proposed plan. The testimony presented at the hearings indicated general agreement with the traffic signal optimization and improved public transportation measures. Opinions on the exclusion of heavy-duty vehicles and the inspection and maintenance of light-duty vehicles varied.

Many individuals expressed concern that the exclusion of heavy-duty vehicles from the central business district would create hardships and economic losses. Most of those commenting at the hearings voiced reservations about the effectiveness, feasibility of implementation, and enforceability of intermittent exclusion of light- and heavy-duty vehicles. The generally held opinion appeared to be that intermittent exclusion, if adopted by the State, should be implemented only as an interim or contingency measure; i.e., all other possible measures should be explored and implemented first. Other comments about intermittent exclusion were that exclusion of light- and heavy-duty vehicles during peak traffic periods may be less detrimental to the viability of the central business district than the proposed exclusion during non-peak periods; that the number of days requiring exclusion may exceed State estimates; and that exclusion may decrease property values and create tax burdens.

Comments made at the hearings on the inspection and maintenance measure dealt with the need for cost control for retrofit installation, the desirability of random rather than mandatory inspections, and the insufficiency of the evidence of retrofit success. Continuous measures such as inspection and maintenance programs appear more acceptable to citizens than intermittent measures.

At the hearings, several persons also indicated that the complete State transportation control plan was not available long enough before the hearing for adequate re-

view. Another frequently expressed concern was that socioeconomic studies and ambient air quality measurements upon which the plan was based were limited.

Upon receipt of the Washington plan, EPA published notice of its arrival in the FEDERAL REGISTER, 38 FR 10465 (Apr. 27, 1973), and invited comments. The comments received in response to the announcement, as well as comments made at the public hearings held by the State of Washington on April 11 and 12, 1973, were considered by EPA in evaluating the transportation control strategies adopted by Washington. The Natural Resources Defense Counsel objected to the proposed use of episodic controls to achieve the CO standard, arguing that they are unreliable; argued that oxidant control measures are needed as well; and called for steps to reduce VMT. The only other comments received were from two oil companies who questioned the availability of catalytic retrofits, among other points.

Based on his review of the material submitted, the Administrator has determined that the intermittent control strategy has not been shown to be an effective means of achieving air quality standards. In addition, other portions of the plan lack the required detail. In the submitted materials, the State indicated that the measurements of oxidant concentrations, upon which the original EPA requirement for a transportation control strategy for the Puget Sound intrastate region was based, are invalid and that no reductions in hydrocarbon emission beyond those achievable through the increasingly stringent Federal [Motor Vehicle Control Program . . .] will be required to attain the oxidant standard by 1975. EPA has requested further substantiation of this claim and a demonstration that no further reduction in hydrocarbon emissions is required.

Based on his review of the transportation strategy submitted by the State of Washington for the Puget Sound intrastate region and the Washington portion of the eastern Washington-northern Idaho interstate region; of the transcripts from the State hearings held on

April 11 and 12, 1973; and of the comments received in response to the announcement in 38 FR 10464, the Administrator has found the Washington submission to be adequate, with certain exceptions, for the attainment of the standards in both the Puget Sound intrastate region and the Washington portion of the eastern Washington-northern Idaho interstate region. The basis for this determination is available to the public in report form at the library of the Environmental Protection Agency, region X, 1200 Sixth Avenue, Seattle, Wash. 98101, and at the Environmental Protection Agency, Office of Public Affairs, 401 M Street SW., Washington, D.C. 20460.

(42 U.S.C. 1857 c-5.)

Dated June 15, 1973.

ROBERT W. FRI,  
*Acting Administrator.*

NOTE.—Pursuant to § 52.02(d), incorporation by reference of approved provisions of State plans was approved by the Director of the Federal Register on May 18, 1972.

Part 52 of Chapter I, Title 40, of the Code of Federal Regulations is amended as follows:

#### Subpart B—Alabama

1. Section 52.50 is amended by revising paragraph (c) to read as follows:

##### § 52.50 Identification of plan.

\* \* \* \* \*

(c) Supplemental information was submitted on:

- (1) March 21, April 18, and April 28, 1972, by the Alabama Air Pollution Control Commission, and
- (2) April 24, 1973.

**§ 52.54 [Amended]**

2. Section 52.54 is amended by revising the attainment date table as follows: The date "May 31, 1975, e" for attainment of the national standards for carbon monoxide in the Metropolitan Birmingham Interstate Region and the national standard for photochemical oxidants (hydrocarbons) in the Metropolitan Birmingham Intra-state and the Mobile (Ala.)—Pensacola-Panama City (Fla.)—Southern Mississippi Interstate Regions, is replaced with the date "May 31, 1975".

**§ 52.55 [Revoked]**

3. Section 52.55 is revoked.

**Subpart C—Alaska**

4. Subpart C is amended by adding § 52.76 as follows:  
**§ 52.76 Control strategy: Carbon monoxide.**

(a) The requirements of § 51.14 of this chapter are not met because the plan does not provide for attainment and maintenance of the national standards for carbon monoxide in the Northern Alaska Intrastate Region by May 31, 1975.

**Subpart D—Arizona**

5. Section 52.120 is amended by revising paragraph (c) to read as follows:

**§ 52.120 Identification of plan.**

\* \* \* \*

(c) Supplemental information was submitted on:

(1) March 1, March 2, and May 30, 1972, by the Arizona State Board of Health.

(2) April 11, 1973, and

(3) May 10, 1973.

6. Section 52.122 is amended by adding paragraph (c) as follows:

**§ 52.122 Extensions.**

\* \* \* \*

(c) Arizona's request under § 55.30 for an 18-month extension for attainment of the national standard for photochemical oxidants (hydrocarbons) in the Phoenix-Tucson Intrastate Region is not applicable since the standard will be attained by May 31, 1975. Arizona's request for an 18-month extension for attainment of the national standards for carbon monoxide in the Phoenix-Tucson intrastate region cannot be granted at this time since it does not adequately satisfy the requirements of § 51.30.

7. Section 52.130 is amended by adding paragraph (b) as follows:

**§ 52.130 Source surveillance.**

\* \* \* \*

(b) The requirements of § 51.19(d) of this chapter are not met because the plan does not provide procedures for obtaining and maintaining data on actual emission reductions achieved as a result of implementing transportation control measures.

8. Section 52.132 is amended by revising paragraph (a) (3) to read as follows:

**§ 52.132 Transportation and land-use controls.**

\* \* \* \*

(3) No later than December 30, 1973, the necessary regulations and administrative policies needed to implement other transportation and/or land-use strategies, and emission controls on bulk tank farms and service station underground storage tanks.

9. Subpart D is amended by adding § 52.134 as follows:

**§ 52.134 Control strategy: Carbon monoxide.**

(a) The requirements of § 51.14 are not met because the plan does not provide for attainment and maintenance of the national standards for carbon monoxide in the Phoenix-Tucson intrastate regions by May 31, 1975.

(b) The requirements of § 51.14(a)(2) are not met because the plan does not provide a description of en-

forcement methods, and proposed rules and regulations pertaining to the selected transportation control measures.

(c) The requirements of § 51.14(b) are not met because the plan contains an air bleed, catalytic retrofit, and loaded inspection control measures which cannot be implemented in time to contribute to the attainment of the national standards for carbon monoxide by May 31, 1975. In addition, implementation of the heavy-duty vehicle retrofit and inspection control measures cannot be assured, even by mid-1977.

10. Subpart D is amended by adding § 52.135 as follows:

#### § 52.135 Resources.

(a) The requirements of § 51.20 are not met because the transportation control plan does not contain a sufficient description of resources available to the State and local agencies and of additional resources needed to carry out the plan during the 5-year period following submittal.

#### Subpart F—California

11. Subpart F is amended by adding § 52.240 as follows:

#### § 52.240 Control strategy: photochemical oxidants (hydrocarbons) and carbon monoxide.

(a) The requirements of § 51.14 of this chapter are not met because the plan does not provide for attainment and maintenance of the national standards for photochemical oxidants (hydrocarbons) and carbon monoxide in the San Francisco Bay Area, San Diego, Sacramento Valley, San Joaquin Valley, and Southeast Desert Intra-state Regions by May 31, 1975.

#### Subpart G—Colorado

12. Subpart G is amended by adding § 52.327 as follows:

#### § 52.327 Control strategy: Photochemical oxidants (hydrocarbons) and carbon monoxide.

(a) Due to late submission of the plan revisions, the Administrator disapproves this portion of the plan because there was insufficient time to analyze and/or include public comment in the approval/disapproval decision and complete his evaluation by June 15, 1973.

#### Subpart J—District of Columbia

13. Section 52.470 is amended by revising paragraph (c) to read as follows:

#### § 54.470 Identification of plan.

\* \* \* \* \*

(c) Supplemental information was submitted on:

(1) Control strategies for sulfur oxides and particulate matter were defined by the District's "Implementation Plan for Controlling Sulfur Oxide and Particulate Air Pollutants" which was submitted on August 14, 1970.

(2) April 28, 1972, by the District of Columbia, and  
 (3) April 19, 1973.

14. Subpart J is amended by adding § 52.474 as follows:

#### § 52.474 Legal authority.

(a) The requirements of § 51.11(c) of this chapter are not met because the plan does not contain copies of regulations allowing for improved regional transit that involves purchase of buses and establishment of appropriate routes and express bus lanes; inspection and retrofit of motor vehicles; and imposition of parking surcharges. The plan does not include regulations required for control of heavy-duty vehicle deliveries, reduction of evaporative losses from gas handling and dry cleaning, and imposition of contingency gas rationing measures.

15. Subpart J is amended by adding § 52.479 as follows:

**§ 52.479 Source surveillance.**

(a) The requirements of § 51.19(d) of this chapter are not met because the plan does not include adequate procedures for determining emission reductions achieved from any of the proposed transportation control measures.

16. Subpart J is amended by adding § 52.483 as follows:

**§ 52.483 Control strategy: Carbon monoxide and photochemical oxidants (hydrocarbons).**

(a) The requirements of § 51.14(a)(2) of this chapter are not met because the plan only identifies and does not describe enforcement methods and because the plan does not contain proposed rules and regulations for the selected transportation strategies.

(b) The requirements of § 51.14(c) of this chapter are not met because the plan neither demonstrates that proposed control strategies are adequate to attain and maintain national standards, nor does the plan state which contingency control measures specifically would be imposed, and, except for potential gas rationing, whether their predicted effect would be adequate to attain and maintain national standards. Reduction claims for retrofit vapor recovery, and aircraft taxing [sic] controls are unduly optimistic. The inspection and maintenance portion of the plan does not explain how consistent failure criteria have been or will be established; nor does the plan include a program of enforcement to ensure against post-inspection adjustments or modifications. The plan does not explain who will be responsible for implementing the training program for mechanics and other personnel. Though the light-duty retrofit strategy is acceptable, it cannot be implemented by May 31, 1975, and thus is disapproved for attainment by May 31, 1975.

17. Subpart J is amended by adding § 52.484 as follows:

**§ 52.484 Resources.**

The requirements of § 51.20 of this chapter are not met because the plan does not include a discussion of additional State resources that may be required, including projections for 5 years.

18. Subpart J is amended by adding § 52.485 as follows:

**§ 52.485 Intergovernmental cooperation.**

The requirements of § 51.21(b)(2) of this chapter are not met because the responsibilities of various agencies in carrying out proposed transportation control measures are not identified.

**Subpart O—Illinois**

19. Section 52.720 is amended by revising paragraph (c) to read as follows:

**§ 52.720 Identification of plan.**

\* \* \* \* \*

(c) Supplemental information was submitted on:

(1) March 13 and April 18, 1972, by the Illinois Environmental Protection Agency,

(2) May 4, 1972, and

(3) April 27, 1973.

20. Subpart O is amended by adding § 52.729 as follows:

**§ 52.729 Control strategy: Carbon monoxide.**

(a) The requirements of § 51.14 of this chapter are not met because transportation and/or land-use control strategies and a demonstration that such strategies along with the Federal motor vehicle control program, will attain and maintain the national standards for carbon monoxide in the Illinois portion of the Metropolitan Chicago interstate region by May 31, 1975, have not been adopted for submission as required.

#### Subpart P—Indiana

21. Subpart P is amended by revising § 52.777 as follows:

**§ 52.777 Control strategy: Photochemical oxidants (hydrocarbons).**

(a) The requirements of § 51.14 of this chapter are not met because the plan does not provide for attainment and maintenance of the national standards for photochemical oxidants (hydrocarbons) in the Metropolitan Indianapolis Intrastate region by May 31, 1975.

22. Subpart P is amended by adding § 52.785 as follows:

**§ 52.785 Control strategy: Carbon monoxide.**

(a) The requirements of § 51.14 of this chapter are not met because the plan does not provide for attainment and maintenance of the national standards for carbon monoxide in the Metropolitan Indianapolis intrastate region by May 31, 1975.

#### Subpart R—Kansas

23. Section 52.870 is amended by revising paragraph (c) to read as follows:

**§ 52.870 Identification of plan.**

\* \* \* \* \*

(c) Supplemental information was submitted on:

(1) March 24, 1972, by the Kansas Department of Health, and

(2) May 29, 1973.

24. Subpart R is amended by adding § 52.881 as follows:

**§ 52.881 Control strategy: Carbon monoxide.**

(a) Due to late submission of the plan revisions, the Administrator disapproves this section of the plan because there was insufficient time to analyze and/or include public comment in the approval/disapproval decision and complete his evaluation by June 15, 1973.

#### Subpart T—Louisiana

25. Section 52.970 is amended by revising paragraph (c) to read as follows:

**§ 52.970 Identification of plan.**

\* \* \* \* \*

(c) Supplemental information was submitted on:

(1) February 28 and May 8, 1972, by the Louisiana Air Control Commission, and

(2) March 30, 1973.

26. Section 52.973 is amended by revising paragraph (a) to read as follows:

**§ 52.973 Control strategy: Photochemical oxidants (hydrocarbons).**

(a) The revision to Louisiana's plan for attainment and maintenance of the national standards for photochemical oxidants (hydrocarbons) in the southern Louisiana-southeast Texas interstate region is disapproved because there was insufficient time to analyze and/or include public comment in the approval/disapproval decision by June 15, 1973.

**§ 52.979 [Amended]**

27. Section 52.979 is amended by revising the attainment date table as follows:

The date "May 31, 1975, c" for the attainment of the national standard for photochemical oxidants (hydrocarbons) in the southern Louisiana-southeast Texas interstate region is replaced with the date "May 31, 1975".

**§ 52.982 [Revoked]**

28. Section 52.982 is revoked.

#### Subpart V—Maryland

29. Section 52.1070 is amended by revising paragraph (c) to read as follows:

**§ 52.1070 Identification of plans.**

\* \* \* \*

(c) Supplemental information was submitted on:

(1) February 25, March 3, March 7, April 4, April 28, and May 8, 1972, by the Maryland Bureau of Air Quality Control, and

(2) April 16, 1973, and May 5, 1973.

30. Section 52.1079 is amended by revising paragraph (a) (1) to read as follows:

**§ 52.1079 Transportation and land use controls.**

(a) \* \* \*

(1) No later than April 15, 1973, transportation and/or land use control strategies and a demonstration that said strategies, along with Maryland's presently adopted stationary source emission limitations for carbon monoxide and hydrocarbons and the Federal motor vehicle control program, will attain and maintain the national standards for carbon monoxide and photochemical oxidants in the Metropolitan Baltimore intrastate and the Maryland portion of the National Capital interstate regions by May 31, 1975. By such date (Apr. 15, 1973), the State also must submit a detailed timetable for implementing the legislative authority, regulations, and administrative policies required for carrying out the transportation and/or land use control strategies by May 31, 1975.

\* \* \* \*

31. Section 52.1074 is amended by adding paragraph (b) as follows:

**§ 52.1074 Legal authority.**

\* \* \* \*

(b) The requirements of § 51.11(c) of this chapter are not met because the plan does not contain or show the availability of legal authority claimed to exist.

32. Subpart V is amended by adding § 52.1080 as follows:

**§ 52.1080 Control strategy: Carbon monoxide and photochemical oxidants (hydrocarbons).**

(a) The requirements of §§ 51.14 (a) (1) and (b) of this chapter are not met because the strategies to control vehicle use are not defined well enough to insure that Maryland will achieve the required degree of emission reduction needed to attain and maintain the national standards for photochemical oxidants and carbon monoxide in the Maryland portion of the National Capital interstate region. Except for proposing an annual inspection program, the plan does not include failure criteria, corrective maintenance provisions, or postinspection enforcement procedures. No information on the availability of adequate supplies of lead-free gasoline is provided. The catalytic retrofit control measure cannot be implemented in time to contribute to attainment of the national standards by May 31, 1975. Furthermore, there is inadequate assurance that a heavy-duty retrofit program or a heavy-duty inspection program can be implemented within the 1975 or 1977 time frame.

(b) The requirements of § 51.14(a) (2) of this chapter are not met because the plan does not specify enforcement methods or contain proposed rules and regulations, administrative procedures, or a schedule for achieving implementation milestones.

(c) The requirements of § 51.14(c) (1) of this chapter are not met because the transportation control strategies are not defined well enough to insure that buildup of pollutant concentrations will not occur.

(d) The requirements of § 51.14(d) of this chapter are not met for the Maryland portion of the National Capital interstate region because a summary of updated emission data was not provided.

(e) The requirements of § 51.14(g) of this chapter are not met for the Maryland portion of the National Capital interstate region because the plan does not include a 3-month summary of current air quality data together with appropriate justification for use of the data and an explanation of their compatibility with correspondingly current emissions data. The requirements of § 51.14(g) of this chapter are not met for the Metropolitan Baltimore intrastate region because the plan does not provide appropriate justification for the use of current air qual-

ity data by virtue of its not providing correspondingly current emissions data.

33. Section 52.1077 is amended by adding paragraph (b) as follows:

**§ 52.1077 Source surveillance.**

\* \* \* \*

(b) The requirements of § 51.19(d) of this chapter are not met for the Metropolitan Baltimore intrastate region or the Maryland portion of the National Capital interstate region because the plan does not include procedures for determining emission reductions achieved from any of the proposed transportation control measures.

34. Subpart V is amended by adding § 52.1083 as follows:

**§ 52.1083 Resources.**

The requirements of § 51.20 of this chapter are not met for the Metropolitan Baltimore intrastate region or the Maryland portion of the National Capital interstate region because the plan does not include a discussion of the adequacy of existing State resources and does not say whether any additional State resources, including projections for 5 years, will be required to carry out any of the proposed transportation control measures.

35. Subpart V is amended by adding § 52.1084 as follows:

**§ 52.1084 Intergovernmental cooperation.**

The requirements of § 51.21(b)(2) of this chapter are not met for the Maryland portion of the National Capital interstate region because the responsibilities of other agencies in carrying out proposed transportation control measures are not identified.

36. Section 52.1072 is amended by adding paragraph (b) as follows:

**§ 52.1072 Extensions.**

\* \* \* \*

(b) The requested 2-year extension for attainment of the national carbon monoxide and photochemical oxidant standards in the Metropolitan Baltimore intrastate and in the Maryland portion of the National Capital interstate regions cannot be granted because the proposed Maryland control strategies do not provide for attainment of these standards by May 31, 1975, or attainment of these standards as expeditiously as practicable, and do not provide for interim control measures.

**Subpart W—Massachusetts**

37. Subpart W is amended by adding § 52.1129 as follows:

**§ 52.1129 Control strategy: Photochemical oxidants (hydrocarbons) and carbon monoxide.**

(a) The requirements of § 51.14 of this chapter are not met because the plan does not provide for attainment and maintenance of the national standards for photochemical oxidants (hydrocarbons) and carbon monoxide in the Metropolitan Boston intrastate region and for carbon monoxide in Massachusetts' portion of the Hartford-New Haven-Springfield interstate region by May 31, 1975.

**Subpart Y—Minnesota**

38. Subpart Y is amended by adding § 52.1228 as follows:

**§ 52.1228 Control strategy: Carbon monoxide.**

(a) The requirements of § 51.14 of this chapter are not met because the plan does not provide for attainment and maintenance of the national standards for carbon monoxide in the Minneapolis-St. Paul intrastate region by May 31, 1975.

**Subpart AA—Missouri**

39. Section 52.1320 is amended by revising paragraph (c) to read as follows:

**§ 52.1320 Identification of plan.**

\* \* \* \*

(c) Supplemental information was submitted on:

(1) February 28, March 27, May 2, May 11, July 12, and August 8, 1972, by the Missouri Air Conservation Commission, and

(2) May 11 and 21, 1973.

40. Subpart AA is amended by adding § 52.1334 as follows:

**§ 52.1334 Control strategy: Carbon monoxide.**

(a) Due to the late submission of the plan revisions, the Administrator disapproves this portion of the plan because there was insufficient time to analyze and/or include public comment in the approval/disapproval decision and complete his evaluation by June 15, 1973.

**Subpart FF—New Jersey**

41. Subpart FF is amended by adding § 52.1582 as follows:

**§ 52.1582 Control strategy and regulations: Photochemical oxidants (hydrocarbons) and carbon monoxide, New Jersey portions of the New Jersey-New York-Connecticut and Metropolitan Philadelphia Interstate Regions.**

(a) The requirements of § 51.14 of this chapter are not met because the plan does not provide for attainment and maintenance of the national standard for photochemical oxidants (hydrocarbons) in the New Jersey portions of the New Jersey-New York-Connecticut interstate and Metropolitan Philadelphia interstate regions by May 31, 1975.

(b) The requirements of § 51.14 of this chapter are not met because the plan does not provide for the attainment and maintenance of the national standard for carbon monoxide in the New Jersey counties of Essex, Camden, and Mercer.

**Subpart HH—New York**

42. Section 52.1670 is amended by revising paragraph

(c) to read as follows:

**§ 52.1670 Identification of plans.**

\* \* \* \*

(c) Supplemental information was submitted on:

(1) February 9, 11, and 14 and March 10, 1972, and  
(2) April 17, 19, and 30, May 2, 16, and 21 and June 11, 1973.

43. Section 52.1672 is amended by adding paragraph (c) as follows:

**§ 52.1672 Extensions.**

\* \* \* \*

(c) The Administrator hereby extends until December 31, 1976, the attainment date for the:

(1) National standards for carbon monoxide in the New York portion of the New Jersey-New York-Connecticut interstate region.

(2) National standard for photochemical oxidants in the New York portion of the New Jersey-New York-Connecticut interstate region.

44. In § 52.1682 the table is revised to read as follows:

**§ 52.1682 Attainment dates for national standards.**

The following table presents the latest dates by which the national standards are to be attained. These dates reflect the information in New York's plan, except where noted.

## POLLUTANTS

Region	Particulate matter		Sulfur oxides		Nitrogen	Carbon	Photo-chemical oxidants (hydrocarbons)
	Primary	Secondary	Primary	Secondary	dioxide	monoxide	
Niagara Frontier Intrastate	(a)	(e)	(b)	(e)	(a)	(a)	(a)
Champion Valley Intrastate	(e)	(e)	(e)	(e)	(e)	(e)	(e)
Central New York Intrastate	(a)	(e)	(e)	(e)	(e)	May 1975	(a)
Genesee-Finger Lakes Intrastate	(a)	(a)	(a)	July 1977	(a)	(a)	May 1975
Hudson Valley Intrastate	(a)	(a)	(a)	July 1977	(e)	(e)	(e)
Southern Tier East Intrastate	(d)	(a)	(d)	July 1977	(e)	(e)	(e)
New Jersey-New York-Connecticut Interstate	(b)	(e)	(a)	(e)	(a)	December 1976	December 1976

NOTE: Dates or footnotes that are in italic are proposed by the Administrator because the plan either did not provide a specific date or the date provided was not acceptable.

a 3 years from plan approval or promulgation.

b 5 years from plan approval or promulgation.

c 18-month extension granted.

d Air quality levels presently below primary standards.

e Air quality levels presently below secondary standards.

45. Section 52.1683 is revised to read as follows:

#### § 52.1683 Transportation and land use controls.

(a) To complete the requirements of § 51.11 and § 51.14 of this chapter, the Governor of New York must submit to the Administrator: (1) No later than July 30, 1973, the legislative authority that is needed for carrying out the transportation and/or land use control strategies; (2) No later than December 30, 1973, the necessary adopted regulations and administrative policies needed to implement such strategies.

#### Subpart KK—Ohio

46. Subpart KK is amended by adding § 52.1877 as follows:

#### § 52.1877 Control strategy: Photochemical oxidants (hydrocarbons).

(a) The requirements of § 51.14 of this chapter are not met because the plan does not provide for attainment and maintenance of the national standards for photochemical oxidants (hydrocarbons) in the Metropolitan Cincinnati interstate, Metropolitan Dayton intrastate, and Metropolitan Toledo interstate regions by May 31, 1975.

#### Subpart MM—Oregon

47. Section 52.1970 is amended by revising paragraph (c) to read as follows:

#### § 52.1970 Identification of plan.

\* \* \* \*

(c) Supplemental information was submitted on May 3, 1972, October 26, 1972, and April 13, 1973.

48. Subpart is amended by adding § 52.1976 as follows:

#### § 52.1976 Control strategy: Carbon monoxide and photochemical oxidants (hydrocarbons).

(a) The requirements of § 51.14(a)(2) of this chapter are not met because the transportation control plan does not contain an adequate description of proposed enforcement methods, proposed rules and regulations, proposed administrative procedures to be used, and schedule of the dates by which significant steps in certain strategies will be achieved.

(b) The requirements of § 51.14(c) of this chapter are not met because the transportation control plan for the Oregon portion of the Portland interstate region does not assure attainment of the national standard for carbon monoxide and photochemical oxidants (hydrocarbons) by May 31, 1975. Although the measures included in the transportation control plan are generally acceptable to the Administrator, the emissions reductions forecast to result from programs for motor vehicle inspection and maintenance, traffic flow improvement, and increased transit usage are unrealistically high. There are no measures as required by § 51.14(c) of this chapter to

prevent traffic flow improvements from leading to an increase in traffic, thereby negating the anticipated emission reduction.

49. Subpart MM is amended by adding § 52.1977 as follows:

**§ 52.1977 Resources.**

(a) The requirements of § 51.20 of this chapter are not met because the transportation control plan does not contain a sufficient description of resources available to the State and local agencies and of additional resources needed to carry out the plan during the 5-year period following submittal.

50. Subpart MM is amended by adding § 52.1978 as follows:

**§ 52.1978 Source surveillance.**

(a) The requirements of § 51.19(d) of this chapter are not met because the transportation control plan does not contain provisions for determining what emission reductions are actually achieved by the inspection and maintenance strategy.

**Subpart NN—Pennsylvania**

51. Section 52.2020 is amended by revising paragraph (c) to read as follows:

**§ 52.2020 Identification of plan.**

\* \* \* \*

(c) Supplemental information was submitted on:

(1) March 17 and 27, and May 4, 1972, by the Bureau of Air Quality and Noise Control, Pennsylvania Department of Environmental Resources,

(2) May 5, 1972, and

(3) April 13, 1973.

52. Section 52.2030 is amended by adding paragraph (c) as follows:

**§ 52.2030 Source surveillance.**

\* \* \* \*

(c) The requirements of § 51.19(c) of this chapter are not met because the plan does not provide procedures for obtaining and maintaining data on actual emission reductions achieved as a result of implementing transportation control measures.

53. Section 52.2031 is amended by adding paragraph (b) as follows:

**§ 52.2031 Resources.**

\* \* \* \*

(b) The requirements of § 51.20 of this chapter are not met because the plan does not contain a sufficient description of resources available to the State and local agencies and of additional resources needed to carry out the plan during the 5-year period following submittal.

54. Section 52.2032 is revised to read as follows.

**§ 52.2032 Intergovernmental cooperation.**

(a) The requirements of § 51.21(b) of this chapter are not met because the plan does not identify other State or local agencies or their responsibilities for implementing and carrying out designated portions of the plan.

(b) The requirements of § 51.21(c) of this chapter are not met because the plan does not indicate that Pennsylvania will transmit to the neighboring States of Maryland, New York, and West Virginia data about factors which may significantly affect air quality in those States.

55. Subpart NN is amended by adding § 52.2036 as follows:

**§ 52.2036 Control strategy: Carbon monoxide and photochemical oxidants (hydrocarbons).**

(a) The requirements of §§ 51.14(b) and 51.14(c) of this chapter are not met because the strategies to restrain vehicle use are not defined and qualified well enough to insure that the necessary reductions in carbon monoxide and hydrocarbons will be achieved; the plan does not provide provisions for preventing increases in concentrations resulting from traffic increases; and the plan lacks a summary of data and calculations used to develop the proposed control measures.

### Subpart SS—Texas

56. Section 52.2270 is amended by revising paragraph (c) to read as follows:

#### § 52.2270 Identification of plan.

\* \* \* \*

(c) Supplemental information was submitted on:

- (1) February 25 and May 2 and 3, 1972, by the Texas Air Control Board,
- (2) July 31, 1972, and
- (3) April 15 and 23, 1973.

57. Subpart SS is amended by adding § 52.2282 as follows:

#### § 52.2282 Public hearings.

(a) The requirements of § 51.4 of this chapter are not met because principal portions of the revised plan were not made available to the public for inspection and comment prior to the hearing.

### Subpart TT—Utah

58. Section 52.2320 is amended by revising paragraph (c) to read as follows:

#### § 52.2320 Identification of plan.

\* \* \* \*

(c) Supplementary information was submitted on May 8, 1972, and April 13, 1973.

59. Section 52.2322 is amended by adding paragraph (a) as follows:

#### § 52.2322 Extensions.

(a) Utah's request for a 2-year extension for attainment of the national standard for carbon monoxide in the Wasatch Front intrastate region cannot be granted since it does not contain adequate information showing why the inspection program cannot be in operation in time to attain the standard by 1975; because the State has not considered and applied reasonably available alterna-

tive means of attaining the standard, including measures to reduce vehicle miles traveled, and because a phased implementation of the inspection program consisting of interim steps has not been discussed or proposed.

60. Section 52.2329 is amended by adding paragraph (b) as follows:

#### § 52.2329 Resources.

\* \* \* \*

(b) The requirements of § 51.20 of this chapter are not met because the transportation control plan does not contain a sufficient description of resources available to the State and local agencies and of additional resources needed to carry out the plan during the 5-year period following submittal.

61. Subpart TT is amended by adding § 52.2335 as follows:

#### § 52.2335 Control strategy: Carbon monoxide.

(a) The requirements of § 51.14(a)(2) of this chapter are not met because the transportation control plan does not contain an adequate description of proposed enforcement methods and designation of enforcement responsibilities, proposed rules and regulations, proposed administrative procedures to be used, and schedule of the dates by which significant steps in certain strategies will be achieved.

(b) The requirements of § 51.14(c) of this chapter are not met because the plan does not provide for the attainment and maintenance of the national standards for carbon monoxide in the Wasatch Front Intrastate Region by May 31, 1975.

62. Subpart TT is amended by adding § 52.2336 as follows:

#### § 52.2336 Source surveillance.

(a) The requirements of § 51.19(d) of this chapter are not met because the transportation control plan does not indicate how surveillance will be accomplished to determine that the claimed emission reductions are being achieved.

**Subpart VV—Virginia**

63. Section 52.2420 is amended by revising paragraph (c) to read as follows:

**§ 52.2420 Identification of plan.**

\* \* \* \*

(c) Supplemental information was submitted on:

(1) May 4, 1972, by the Virginia Air Pollution Control Board, and

(2) April 11 and May 30, 1973.

64. Section 52.2424 is amended by adding paragraph (b) as follows:

**§ 52.2424 General requirements.**

\* \* \* \*

(b) The requirements of § 51.10(b) of this chapter are not met because the plan does not provide for attainment and maintenance of the national standards for carbon monoxide and photochemical oxidants (hydrocarbons) as expeditiously as practicable, as evidenced by the State's failure to propose interim control measures to be implemented during the 2-year period for which an extension to attain the national standards was requested.

65. Section 52.2427 is amended by adding paragraph (c) as follows:

**§ 52.2427 Source surveillance.**

\* \* \* \*

(c) The requirements of § 51.19(d) of this chapter are not met because the plan does not provide procedures for determining actual emission reductions achieved as a result of implementing the proposed transportation control measures.

66. Section 52.2428 is amended by adding paragraph (c) as follows:

**§ 52.2428 Request for 2-year extensions.**

\* \* \* \*

(c) The 2-year extension requested for attainment and maintenance of the national standards for carbon monoxide and photochemical oxidants (hydrocarbons) in Virginia's portion of the National Capital interstate region cannot be granted because the plan does not provide reasonable interim control measures.

**§ 52.2429 [Amended]**

67. In § 52.2429, the attainment date table is amended by replacing the date January 1975 for attainment of the national standards for carbon monoxide and photochemical oxidants (hydrocarbons) in the National Capital interstate region with the date "May 31, 1975."

68. Subpart VV is amended by adding § 52.2430 as follows:

**§ 52.2430 Legal authority.**

(a) The requirements of § 51.11(c) of this chapter are not met because the plan does not identify or provide copies of laws or regulations, necessary for carrying out the proposed transportation control measures.

69. Subpart VV is amended by adding § 52.2431 as follows:

**§ 52.2431 Control strategy: Carbon monoxide and photochemical oxidants (hydrocarbons).**

(a) The requirements of § 51.14(a)(2) of this chapter are not met because the plan does not provide a description of enforcement methods for all control measures, proposed rules and regulations for all control measures, or a schedule designating dates by which significant steps of the plan and each control measure will be implemented.

(b) The requirements of § 51.14(b) of this chapter are not met because the plan contains a catalytic retrofit control measure which cannot be implemented in time to contribute to the attainment of the national standards for carbon monoxide and photochemical oxidants (hydrocarbons) by May 31, 1975.

(c) The requirements of § 51.14(c) of this chapter are not met because the plan does not demonstrate that

the proposed control measures are adequate for attainment and maintenance of the national standards.

(d) The requirements of § 51.14(g) of this chapter are not met because a justification is not provided in the plan for the air quality data used as a baseline for plan development.

70. Subpart VV is amended by adding § 52.2432 as follows:

#### § 52.2432 Resources.

(a) The requirements of § 51.20 of this chapter are not met because the plan does not contain a sufficient description of resources available to the State and local agencies, and of additional resources needed to carry out the plan during the 5-year period following submittal.

71. Subpart VV is amended by adding § 52.2433 as follows:

#### § 52.2433 Intergovernmental cooperation.

(a) The requirements of § 51.21 of this chapter are not met because the plan does not adequately identify the State and local agencies, and their responsibilities, involved in carrying out the proposed transportation control measures.

72. Subpart VV is amended by adding § 52.2434 as follows:

#### § 52.2434 Transportation and land use controls.

(a) To complete the requirements of §§ 51.11(b) and 51.14 of this chapter, the Governor of Virginia must submit to the Administrator:

(1) No later than July 31, 1973, the legislative authority that is needed for carrying out the required transportation control alternatives.

(2) No later than December 31, 1973, the necessary adopted regulations and administrative policies needed to implement the transportation control alternatives.

#### Subpart WW—Washington

73. Section 52.2470 is amended by revising paragraph (c) to read as follows:

#### § 52.2470 Identification of plan.

\* \* \* \* \*

(c) Supplemental information was submitted on January 28, 1972, May 5, 1972, April 16, 1973, and May 21, 1973.

74. Subpart WW is amended by adding § 52.2477 as follows:

#### § 52.2477 Source surveillance.

(a) The requirements of § 51.19(d) of this chapter are not met because procedures are not described for monitoring the status of compliance of the traffic-signal optimization programs, the heavy-duty vehicle exclusion programs, and the public transit programs in the Puget Sound intrastate region and in the Eastern Washington-Northern Idaho interstate region.

75. Subpart WW is amended by adding § 52.2481 as follows:

#### § 52.2481 Control strategy: Control monoxide and photochemical oxidants (hydrocarbons).

(a) The requirements of § 51.14(a)(2) of this chapter are not met because the transportation control plan does not contain an adequate description of proposed enforcement methods, proposed rules and regulations, proposed administrative procedures to be used, and schedule of dates by which significant steps in the inspection strategy will be achieved.

(b) The requirements of § 51.14(b) of this chapter are not met because the plan contains a loaded inspection control measure which cannot be implemented in time to contribute to the attainment of the national standards for carbon monoxide and photochemical oxidants (hydrocarbons) by May 31, 1975.

(c) The requirements of § 51.14(c) of this chapter are not met because the transportation control plan does

not assure attainment of national standards for carbon monoxide in the Puget Sound intrastate region and in the Washington portion of the Eastern Washington-Northern Idaho interstate region and of national standards for photochemical oxidants (hydrocarbons) in the Puget Sound intrastate region by May 31, 1975.

76. Subpart WW is amended by adding § 52.2482 as follows:

**§ 52.2482 Air quality surveillance.**

(a) The requirements of § 51.17(a)(1) of this chapter are not met because the transportation control plan does not provide adequate assurance that air quality surveillance systems sufficient to establish the efficacy of the selected transportation control measures in attaining standards in both the Puget Sound intrastate and Eastern Washington-Northern Idaho interstate regions will be implemented and operated.

77. Subpart WW is amended by adding § 52.2483 as follows:

**§ 52.2483 Resources.**

(a) The requirements of § 51.20 of this chapter are not met because the transportation control plan does not contain a sufficient description of resources available to the State and local agencies and of additional resources needed to carry out the plan during the 5-year period following submittal.

[FR Doc. 73-12351 Filed 6-21-73; 8:45 am]

**[40 CFR Part 52]**

**CALIFORNIA AIR QUALITY CONTROL**

**Approval and Promulgation of  
Implementation Plans**

This notice of proposed rulemaking sets forth a revised transportation control plan for the Metropolitan Los Angeles Intrastate Air Quality Control Region (hereinafter, Los Angeles AQCR or South Coast Air Basin).

**BACKGROUND**

In accordance with an order of the U.S. District Court for the Central District of California, November 16, 1972, a transportation control plan for the Los Angeles AQCR was proposed on January 15, 1973, and published in the **FEDERAL REGISTER** of January 22, 1973, with minor corrections on February 7, 1973 (38 FR 2194, 3526). Pursuant to the notice published on February 1, 1973 (38 FR 3085), public hearings were held at nine locations throughout the South Coast Air Basin, over a three-week period from March 5 to March 22, 1973. 240 witnesses testified on all aspects of the proposed plan and on various alternatives. The complete transcript is available for inspection at the Federal Information Center, 300 North Los Angeles Street, Room 1011, Los Angeles, California 90012; the U.S. Environmental Protection Agency, Region IX, 100 California Street, San Francisco, California 94111, and the U.S. Environmental Protection Agency, Office of Public Affairs, Room W311, 401 M Street, S.W., Washington, D.C. 20460.

A final transportation control plan will be promulgated for the Los Angeles AQCR on August 15, 1973, along with plans for other AQCRs needing federal promulgation. This revised proposal is being set forth at this time in order to solicit public comment on the current thinking of the Agency.

### SUMMARY

Studies available to the Administrator at present indicate that a reduction on the order of 90 percent would be necessary in projected 1975 emissions of reactive hydrocarbons in order to attain the National Primary Ambient Air Quality Standard for photochemical oxidants in the Los Angeles AQCR. Much of that reduction will take place due to control measures submitted by the State and already approved, but these measures are not enough to meet the standards. The Administrator has concluded that an extension to 1977 of the deadline for achieving the standards under section 110(e) of the Clean Air Act, is justified because the necessary technology or other alternatives are not available and will not be available soon enough to permit full compliance. In reaching this conclusion the Agency has considered and applied as a part of its plan reasonably available alternative means of attaining the primary standard.

The plan set forth herein provides for the application of its requirements to all emission sources other than motor vehicles no later than May 31, 1975, as required by section 110(e)(2)(A), and provides for reasonable interim measures of control for motor vehicles prior to 1977.

Most of this plan concerns the reasonable and apparently available means of reducing oxidants (as well as nitrogen dioxide), including requirements for bus and carpool lanes on freeways and major streets, reductions in off-street public parking, limitations on the construction of additional parking facilities, limitations on motorcycles, mandatory inspection and maintenance of light-duty vehicles, and a lid on further increases in gasoline consumption. These will be required prior to 1975 in most cases.

Other portions of the plan concern measures which appear reasonable but do not, at present appear to have been developed to the point of application in 1975, due to technical problems related to retrofit devices such as

catalytic converters. These will be required beginning in 1976 with full implementation by 1977, although they will be required earlier if they become available earlier. Even if all the reasonable measures mentioned above are imposed, it is quite possible, indeed probable, that the national standard for photochemical oxidants cannot be met in the Los Angeles AQCR by 1977. Achievement of the nitrogen dioxide standard is likewise uncertain. Under the Clean Air Act as written, the Agency has no choice but to include in this plan a measure which can achieve the standards in 1977 even if it appears impracticable and unworkable. Consequently, gasoline and diesel fuel limitations of whatever degree necessary have been included for 1977. (An alternative to diesel fuel reduction would have been drastic cuts in aircraft flights or relocation of stationary sources.) If implemented, this would achieve the standards for both photochemical oxidants and nitrogen dioxide. However, the Agency will utilize every means available to avoid the need to impose impractical measures to reach that goal by 1977. It should be noted that grounds for a one-year extension of the compliance date for certain sources under section 110(f) of the Clean Air Act may arise, meaning that certain requirements of this plan may not be imposed until May 31, 1978.

### THE NEED FOR MASS TRANSIT

The development of large-scale mass transit facilities in the Los Angeles area is essential to any effort to reduce automotive pollution through restrictions on vehicle use. The planning, acquisition, and operation of a mass transit system is, and should remain, a local responsibility. However, the automobile problem does not follow the boundaries of counties or cities in the South Coast Air Basin and current planning and operating agencies for mass transit do not appear to have sufficient authority to provide for adequate regional public transit. Consequently, the Agency strongly endorses the concept of a nationwide transportation planning and operation authority.

The Agency also actively encourages the immediate and large-scale purchase of additional public transportation facilities, most specifically including additional buses and an increased examination of the feasibility of rail transit. To create conditions conducive to rapid bus transit, several of the measures in this plan give preferential treatment to buses.

The Agency also encourages close examination of such measures as fare reductions, bicycle lanes, provision of jitney service and more minibuses, fringe parking lots for buses and carpools, special parking privileges for carpools, on-street parking prohibitions for non-residents, state taxes to encourage VMT reductions while raising revenue to benefit mass transit, and provision of bus tokens in place of free parking privileges.

#### STATE AND LOCAL IMPLEMENTATION OF CONTROL MEASURES

In order to preserve the scheme of the Clean Air Act whereby local pollution problems will be dealt with primarily at the local level, the Agency will require State and local governmental entities to take actions whenever possible, and will not involve the Federal government in the administration of local programs and in direct enforcement against individual citizens. Requirements of this sort are proposed with regard to bus/carpool lanes, motorcycle controls, public parking facilities, inspection/maintenance, and gas limitations. Appropriate governmental entities will also be required to submit compliance schedules for these programs with complete details on their implementation.

Testimony both for and against controls on motorcycles was received, including commitments from motorcycle interests to bring the present high level of emissions down to the vicinity of those achieved by automobiles. Since neither widespread testing methods nor technology appears to exist at present, it is proposed that the worst polluters—two-stroke motorcycles—not be allowed to operate during the smog-prone daylight hours in the

summer months within the Basin. In addition, an overall lid on the increase in numbers of motorcycles is proposed to prevent counterproductive shifts from automobiles to motorcycles as a result of other elements of the control strategy. The Agency will evaluate the feasibility of establishing emission standards for new motorcycles and will evaluate the availability of motorcycle emission control technology for meeting emission standards and for retrofit.

Publicly owned off-street parking facilities will be required to reduce their number of parking spaces in an effort to reduce the high number of low-occupancy private vehicles entering the Central Business Districts and other congested areas, and to promote voluntary carpooling and use of bus transit. Comment is invited on the possibility of extending this control to privately owned parking facilities, either by outright reduction in spaces or by imposing regulatory fees.

The State of California is proceeding with an inspection system, which will result in emission reductions. The proposal herein will require that such system be expanded to require mandatory annual inspection of all vehicles.

Catalytic converters would be required in 1976-77 for many pre-1975 vehicles. It cannot be concluded at present that the technology for retrofit converters has developed to the point that they could be installed effectively as "retrofit" devices in 1975. However, the Agency will monitor the status of development of this technology and accelerate the dates if feasible.

If the State submits adequate control measures in any of these areas, or substitute control measures which will achieve comparable reductions in pollution, then the Administrator can approve the State's measures rather than promulgate his own. However, the requirements to submit adequate compliance schedules and take other action will be enforced on a timely basis if the Agency's measures are promulgated. Therefore, it is suggested that planning to comply with these measures not be delayed in hopes of approval of substitute measures.

#### REVISED CONTROL STRATEGY—MOBILE SOURCES

Substantial testimony at the public hearings supported the concept of converting lanes on existing freeways and streets to bus or bus/carpool lanes. The measures proposed herein will require conversion of some lanes on all major streets and highways, and it is expected that a widespread network of bus/carpool lanes will provide substantial incentives to the use of buses and carpools while making private vehicle travel by single drivers relatively less attractive. Planning for specific lanes is expected to take place at the local level, under the overall requirements herein. Exceptions to or modifications of the broad requirements will be approved when specifically justified. Since it will take some time before sufficient buses are available to carry the passengers currently using these lanes in private cars, these proposed regulations would permit the use of the lanes by carpools with three or more persons in the vehicle. The Department of Transportation recommended total conversion of all freeways and major arterial streets to the exclusive use of buses and carpools during rush hours, but it is believed that such a measure implemented in a short time frame would not provide sufficient transportation for the area, considering the number of persons who must travel to work and the large variety of trip origins and destinations.

Another provision would limit further construction of new parking areas in the Basin.

The Agency's earlier proposal for gasoline rationing was required to meet the court order. A system of rationing in the ordinary sense is not being proposed at this time. Instead, it is proposed that the continuing growth in vehicle miles traveled within the Basin be stopped by limiting the continued growth in gasoline consumption. Gasoline consumption has been increasing approximately 4.5 percent per year. It is proposed that distributors not be permitted to deliver to retail outlets any more gasoline than was distributed during the "base year" of July 1972—June 1973. No requirements will

be placed on individual motorists, unless the State of California chooses to do so. The impact of this limitation will be much less severe and far more easily administered than a rationing system of great magnitude as was earlier proposed. In fact, the limitations on vehicle miles traveled which are expected to result from the conversion of existing lanes to bus/carpool lanes, as well as the reductions in publicly owned parking spaces, expansion of service of bus companies, and various local efforts to shift to less-polluting transportation, may very well reduce the demand for gasoline consumption sufficiently that the ceiling on increase in consumption will have a relatively light impact. This approach of combining a number of measures rather than relying on a single measure was supported by numerous witnesses at the public hearings.

Regulations for gaseous fuel conversion are not being repropoosed at this time due to the limited supply of gaseous fuels and the likelihood that the fleets to which the regulation would be applicable will continue to acquire the newer, cleaner gasoline-powered vehicles. Evaporative controls are not being repropoosed due to the lack of demonstrated technology and the low likelihood of its development.

#### CONTROL STRATEGY—STATIONARY SOURCES

In many instances, the controls on stationary sources in the South Coast Basin are among the most stringent in the country. It should be noted, however, that stationary source pollution could threaten the attainment and maintenance of the national standards even if automotive pollution were totally eliminated. Thus, serious consideration should be given to the exercise of land-use controls to control the growth of stationary sources, as well as to developing more stringent emission controls. The Agency is conducting an emission inventory of stationary sources and examining the question of reactivity of hydrocarbons, which may substantially change the emission numbers for stationary sources.

The Agency is considering modifications to the regulations proposed in January on vapor collection and dis-

posal systems. The modifications would limit coverage to gasoline rather than other organic solvents, raise the degree of control necessary, and require control earlier for large tanks. Consideration is also being given to requiring use of water-based solvents and solid coatings for surface coating and to requiring use of non-photochemically-reactive solvents, rather than merely encouraging such use. EPA-industry studies underway at present are expected to result in further considerable reactive hydrocarbon and organic emission reductions. Although proposed regulations for control of drycleaning solvent evaporation, gasoline storage and transfer, degreasing operations, and organic solvent usage are not printed in this notice, regulations proposed for other states today indicate the kinds of measures being considered and it is anticipated that regulations of this sort will be promulgated for the South Coast Basin. (See table on Compilation of Control Strategy Effects)

**COMPILATION OF CONTROL STRATEGY EFFECTS  
(TONS/DAY REACTIVE HYDROCARBONS)**

	1970 Emissions	1977 Emissions With 100% EPA Plan	1977 Emissions With EPA Gasoline Plan (30% and 60% VMT Re- duction)	1977 Emissions With 100% EPA Plan
LDV Exhaust ....	768	319	146	0
LDV Evap.				
Crankcase .....	396	118	83	0
HDV Exhaust ....	68	48	34	0
HDV Evap.				
Crankcase .....	18	8	6	0
Gasoline				
Marketing .....	137	151	14	0
HDV Diesel				
Exhaust .....	26	24	24	9
Motorcycles:				
2-Stroke .....	20	33	0	0
4-Stroke .....	7	12	9	0
Aircraft .....	38	25	25	25
Ships,				
Railroads .....	5	6	6	6
Stationary .....	118	104	72	72
	1601	848	[419] <sup>3</sup>	112 <sup>4</sup>

<sup>1</sup> Includes growth in sources from 1970. Emission reductions are due to federal/state controls on new vehicles, new aircraft, state VSAD and PCV retrofit on existing vehicles, and state controls on stationary sources.

<sup>2</sup> Includes all measures in this proposal except an impractical degree of gasoline and diesel fuel reduction, a relocation of stationery [sic] sources, or a drastic cut in aircraft flights.

<sup>3</sup> 419 tons/day are expected to prevent the worst oxidant readings from exceeding .20 to .25 ppm, and to reduce the number of hours with readings above .08 ppm by 75% to 90%.

<sup>4</sup> 112 tons/day are allowable to achieve the ambient air quality standard for photochemical oxidants of .08 ppm.

### SUBMITTAL OF WRITTEN COMMENTS

Interested persons may participate in this rulemaking by submitting written comments, preferably in triplicate, to the Regional Administrator, EPA, 100 California Street, San Francisco CA 94111. All relevant comments received before July 10, 1973, will be considered. Receipt of comments will be acknowledged, but substantive responses to individual comments will not be provided. Comments received will be available for public inspection at the regional office. The final promulgation of regulations for the Metropolitan Los Angeles Intrastate Air Quality Control Region will take place on August 15, 1973. This notice of proposed rulemaking is issued under the authority of section 110(c) and section 301(a) of the Clean Air Act (42 U.S.C. 1857 et seq.).

Dated: June 22, 1973.

ROBERT W. FRI,  
*Acting Administrator.*

It is proposed to amend Part 52 of Chapter I, title 40, of the Code of Federal Regulations by adding the following:

#### Subpart F—California

1. Subpart F is amended by adding the following sections:

##### § 52.241 Gasoline limitations.

###### (a) Definitions:

(1) The term "base year" means the consecutive twelve month period commencing on July 1, 1972, and ending June 30, 1973.

(2) The term "distributor" means any corporation, partnership, or sole proprietorship which transports or stores or causes the transportation or storage of gasoline between any refinery and any retail outlet.

(3) The term "retail outlet" means any establishment at which gasoline is sold or offered for sale to the public, or introduced into any vehicle.

(b) This section is applicable in the Metropolitan Los Angeles Intrastate AQCR (hereinafter the "AQCR"), to all distributors of gasoline to any retail outlet in this area and to the owners of all retail outlets in this area.

(c) (1) Beginning July 1, 1974, the State of California shall implement regulations limiting the total gallonage delivered to retail outlets in the AQCR to the amount delivered to such outlets during the base year.

(2) Beginning May 31, 1977, the State of California shall implement regulations limiting the total gallonage of gasoline and diesel fuel delivered to retail outlets to that amount which, when combusted, will not result in the ambient air quality standard being exceeded. The State shall by January 1, 1977, submit to the Administrator regulations to accomplish this limitation and specifying the amount of limitation necessary.

(d) In order for the State to determine the amount of gasoline delivered during the base year and years during which control is in effect, all distributors to which this section applies shall provide the State with a detailed accounting of the amount of gasoline delivered to each retail outlet in the AQCR during the base year and years during which control is in effect. For each year during which control is in effect, the owner of each retail outlet to which this section applies shall provide the State with a detailed accounting of gasoline received from each distributor, the total amount of gasoline sold during the year, and the amount of gasoline on hand at the beginning and end of the year. The State may require any other reports as it may deem necessary for the implementation of this section.

(e) The State of California shall submit no later than October 1, 1973, a detailed compliance schedule showing steps it will take to establish and enforce the limitation program specified in paragraphs (c)(1) and (d) of this section, including the text of needed statutory proposals and needed regulations which it will propose for adoption. Each schedule shall also include the following:

(1) A date by which the State shall adopt procedures to ensure that no more than the amount of gasoline specified in paragraph (c)(1) of this section is delivered to retail outlets in the AQCR. Such date shall be no later than March 30, 1974.

(2) A date by which any report necessary for establishing such procedures will be furnished to the State by the distributors. Such date shall be no later than January 1, 1974.

(3) An agency responsible for implementation and monitoring of this program.

(f) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, a State will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.242 Inspection and maintenance program.

##### (a) Definitions:

(1) "Inspection and maintenance program"—a program to reduce emissions from in-use vehicles through identifying vehicles which need emission control-related maintenance and requiring that maintenance be performed.

(2) All other terms used in this section which are defined in 40 CFR Part 51, Appendix N, are used herein with the meanings so defined.

(b) This section is applicable in the Metropolitan Los Angeles Intrastate Air Quality Control Region.

(c) The State of California shall establish an inspection and maintenance program applicable to all light duty vehicles which operate on streets or highways over which it has ownership or control. No later than March 1, 1974, the State shall submit legally adopted regulations to

EPA establishing such a program. The regulations shall include:

(1) Provisions for inspection of all motor vehicles at periodic intervals no more than one year apart by means of a loaded test.

(2) Provisions for inspection failure criteria consistent with the emissions reductions claimed in the plan for the strategy. These criteria shall include failure of 50 percent of the vehicles in the first inspection cycle.

(3) Provisions to ensure that failed vehicles receive the maintenance necessary to achieve compliance with the inspection standards. This shall include sanctions against individual owners and repair facilities, retest of failed vehicles following maintenance, a certification program to insure that repair facilities performing the required maintenance have the necessary equipment, parts and knowledge to perform the tasks satisfactorily, and such other measures as may be necessary or appropriate.

(4) A program of enforcement to insure that vehicles are not intentionally readjusted or modified subsequent to the inspection and/or maintenance in such a way as would cause them to no longer comply with the inspection standards. This might include spot checks of idle adjustments and/or a suitable type of physical tagging.

(5) Designation of an agency or agencies responsible for conducting overseeing, and enforcing the inspection and maintenance program.

(d) After January 1, 1975, the State shall not register or allow to operate on its streets or highways any light duty vehicle which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After January 1, 1975, no owner of a light duty vehicle shall operate or allow the operation of such vehicle which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(f) The State of California shall submit no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce an inspec-

tion and maintenance program pursuant to paragraph (c) of this section, including the text of needed statutory proposals and needed regulations which it will propose for adoption.

(1) The compliance schedule shall also include:

(i) The date by which the State will recommend needed legislation to the State legislature.

(ii) The date by which necessary equipment will be ordered.

(iii) A signed statement from the Governor or his designee identifying the sources and amounts of funds for the program. If funds cannot legally be obligated under existing statutory authority, the text of needed legislation will be submitted.

(g) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, the State will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.243 Bus/carpool lanes.

##### (a) Definitions:

(1) "Carpool"—a vehicle containing three or more persons.

(2) "Bus/carpool lane"—a lane on a street or highway open only to buses or buses and car pools, whether constructed specially for that purpose or converted from existing lanes.

(3) "Major street or highway"—any street or highway which meets the criteria given in paragraph (b) (4) (ii) and (iii) of this section.

(b) The following constitutes the first stage of the bus/carpool control strategy for the Metropolitan Los Angeles Intrastate Air Quality Control Region.

(1) Each incorporated city within the Metropolitan Los Angeles Air Quality Control Region shall establish bus/carpool lanes on the major streets and highways (as defined herein) over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(2) Each county within the Metropolitan Los Angeles Air Quality Control Region shall establish bus/carpool lanes on the major streets and highways (as defined herein) within the Region over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(3) The State of California shall establish bus/carpool lanes on the major streets and highways (as defined herein) within the Region over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(4) Each of the governmental entities named in the previous three subparagraphs shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps which it will take to establish these bus/carpool lanes and to enforce the limitations on their use, with each schedule to include the following:

(i) Each street and highway which will have bus/carpool lanes must be identified with a schedule for the establishment of the lanes.

(ii) If a street or highway has four or more traffic lanes in one direction, at least one of these lanes must be open only to buses or buses and car pools) at all times. If only one lane is open to buses (or buses and car pools) at all times, a second lane must be open only to buses (or buses and car pools) from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

(iii) If a street or highway has three traffic lanes in one direction, at least one of these lanes must be open only to buses (or buses and car pools) from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

(iv) In unusual situations, a street or highway, or lane or segment thereof, may be exempt from these requirements if an approval of the exemption is obtained

from the Administrator. The application for exemption shall not be submitted and will not be accepted after September 1, 1973. Special circumstances justifying the need for an exemption or modification (such as inappropriateness of use by buses or desire to allow bus/carpool lanes to be entered briefly by other vehicles for the purpose of crossing a lane or making a right turn) must be given in detail with the application.

(v) Bus/carpool lanes must be prominently indicated by overhead signs at least once every mile, and at each intersection or entry ramp. Twenty-five percent of the lane mileage for each of the governmental entities must be established and needed signs must be installed by March 1, 1974; fifty percent by June 1, 1974; seventy-five percent by September 1, 1974; one hundred percent by December 1, 1974.

(vi) Bus/carpool lanes must be prominently indicated by distinctive painted lines, pylons, or physical barrier.

(vii) A signed statement by the chief executive officer of each governmental entity or his designee will identify the sources and amounts of funds for all projects.

(5) Buses shall have the right of way whenever changing lanes on streets and highways with bus lanes. This shall take effect as each lane is established and identified.

(6) Buses shall be permitted to make left turns whether or not the intersection is posted for "No Left Turn" (except when a one-way street would be entered from the wrong direction). This shall take effect January 1, 1974.

(7) None of the governmental entities named in paragraph (b) of this section shall convert existing on-street parking spaces to use as motor vehicle traffic lanes unless the effect will be to increase the number of bus/carpool lanes on the affected street beyond the number otherwise required by paragraph (b) of this section.

(c) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113

of the Clean Air Act. With regard to compliance schedules, a governmental entity will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.244 Management of parking supply.

##### (a) Definitions:

(1) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land to use as a facility.

(2) "Modification" means any change to a parking facility which increases the motor vehicle capacity of such facility.

(3) "Enlargement" means any physical change or addition to a parking facility which increases the motor vehicle capacity of such facility.

(4) "Commenced" means the date on which an owner or operator, and a contractor to or affiliate of such owner or operator, enter into a binding agreement or contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction, modification or enlargement.

(5) "Parking facility" (also called "facility") means any facility, building, structure, or lot or portion thereof used primarily for temporary storage of motor vehicles.

(b) This regulation is applicable in the Metropolitan Los Angeles Air Quality Control Region.

(c) No person, after the date of this regulation, shall commence construction of any new parking facility or modify or enlarge any existing parking facility until he has first received from the Administrator or from an agency approved by the Administrator a permit stating that construction, modification or enlargement of such facility will not interfere with the attainment or maintenance of applicable Federal Air Quality Standards.

(d) In order for any agency to be approved by the Administrator for purposes of issuing permits for con-

struction of any new parking facility or any modification or enlargement of any existing parking facility such agency shall demonstrate to the satisfaction of the Administrator that:

(1) Requirements for permit applications and issuance have been established. Such requirements shall include but not be limited to a requirement that before a permit may be issued, the following findings of fact or factually supported projections must be made:

- (i) The location of the proposed facility.
- (ii) The total motor vehicle capacity of the proposed facility.
- (iii) The normal hours of operation of the proposed facility and the enterprises and activities which it serves.
- (iv) The number of people using or engaging in any enterprises or activities which the proposed facility will serve.
- (v) The number of motor vehicles using the proposed facility on an average hourly basis and a peak hour basis.
- (vi) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the proposed facility. Such projections shall include data concerning the availability of public transit from such areas.

(2) Criteria for issuance of permits have been established and published. Such criteria shall include but not be limited to:

- (i) Full consideration of all facts contained in the application.
- (ii) Provisions that no permit shall be issued if such permit will result in the increase of VMT within any area the air quality of which fails to meet applicable Federal air quality standards.
- (3) Agency procedures provide that no permit for the construction, enlargement or modification of a facility covered by this section shall be issued without notice and

opportunity for public hearing. The public hearing may be of the legislative type; the notice shall conform to the requirements of 40 CFR 51.4(b); and the agency rules of procedure may provide that if no notice of intent to participate in the hearing is received from any member of the public (other than the applicant) prior to seven days before the scheduled hearing date, no hearing need be held. Such a requirement, if imposed, shall be noted prominently in the required notice of hearing.

#### § 52.245 Limitation of public parking.

##### (a) Definitions:

(1) The term "off-street parking facility" means any land or building or portion of a building set aside for the purpose of storing a maximum capacity of ten or more motor vehicles on a temporary basis.

##### (b) Off-street parking facilities:

(1) Each governmental entity or public agency owning or operating an off-street parking facility located within the Metropolitan Los Angeles Air Quality Control Region shall, by October 1, 1973, report to the Administrator the number of motor vehicle parking spaces in each such facility under its ownership or control.

(2) Each such owner or operator of any off-street parking facility located within the area specified in paragraph (b)(1) of this section shall reduce the number of motor vehicle parking spaces in each such facility from the number in existence as of October 1, 1973, according to the following schedule:

By January 31, 1974—a reduction of 5%  
 By July 31, 1974—a reduction of 10%  
 By December 31, 1974—a reduction of 15%  
 By April 30, 1975—a reduction of 20%

(3) Each such owner or operator of an off-street parking facility subject to the requirements of paragraph (b)(2) of this section shall submit to the Administrator, no later than October 31, 1973, a detailed compliance schedule showing the steps it will take to achieve the required reduction in motor vehicle parking spaces. Such

schedule shall provide for the marking in some manner obvious to the public (such as painting over, roping off, or the like) of the spaces eliminated pursuant to this regulation on which parking is not permitted.

(c) Failure to submit a compliance schedule as required by this regulation shall render the person so failing in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. Any owner or operator of a parking facility who allows any motor vehicle to be parked on any parking space which has been eliminated pursuant to this regulation, or who fails to mark clearly those spaces which have been eliminated, shall likewise be in violation and subject to enforcement.

#### § 52.246 Motorcycle limitation program.

##### (a) Definitions:

(1) "Motorcycle"—any self-propelled two or three wheeled motor vehicle capable of carrying one or more persons.

(2) "Four stroke engine"—an internal combustion engine which requires four strokes of the engine's pistons for a complete cycle of operation.

(3) "Two stroke engine"—an internal combustion engine which requires two strokes of the engine's pistons for a complete cycle of operation.

(4) "Registration"—the action of a State allowing a vehicle to be operated on the streets and highways in that State during a defined period of time.

(5) "Registration period"—that period of time for which a vehicle is allowed to be used within the State.

(b) This section is applicable in the Metropolitan Los Angeles Intrastate Air Quality Control Region.

(c) As of January 1, 1974, or any registration period which commences during the calendar year 1974, the State of California shall not register in the Metropolitan Los Angeles Intrastate Air Quality Control Region more motorcycles than the total number registered in 1973.

(d) As of May 1, 1974, the State of California shall prohibit the operation of two stroke motorcycles in the Metropolitan Los Angeles Intrastate Air Quality Control Region between 6:00 a.m. and 8:00 p.m. during the months of May, June, July, August, September, and October.

(e) After January 1, 1974, no person shall operate any motorcycle on the streets and highways of the State within the Metropolitan Los Angeles Intrastate AQCR which is not validly registered by the State of California or by another State.

(f) No later than October 1, 1973, the State shall submit a detailed compliance schedule showing steps it will take to implement and enforce these requirements, including the text of needed statutory proposals and needed regulations which it will propose for adoption. Each schedule shall also include the following:

(1) A date by which the State will adopt procedures necessary to limit the number of motorcycles registered as required above, to restrict the operation of two-stroke motorcycles as required above and to require the registration of all motorcycles operated as required above.

(2) Proposed procedures to ensure that no motorcycle will be registered by the State in a county other than that of the owner's legal residence.

(3) A date by which such procedures will go into effect. Such date shall be no later than January 1, 1974.

(g) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, the State will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

§ 52.248 Oxidizing catalyst retrofit.

(a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of the vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbons and carbon monoxide from that vehicle.

(2) All other terms used in this section which are defined in 40 CFR Part 51, Appendix N, are used herein with the meanings so defined.

(b) This section is applicable in the Metropolitan Los Angeles Intrastate Air Quality Control Region.

(d) The State of California shall establish a retrofit program to ensure that on or before May 1, 1977, certain gasoline powered light duty vehicles of model years 1966 through 1974 subject under presently existing legal requirements to registration in the area defined in paragraph (b) of this section above are equipped with an appropriate oxidizing catalyst retrofit device. No later than March 1, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use on vehicles subject to this section.

(2) Designation of an agency responsible for insuring that the provisions of paragraph (d) (3) of this section are enforced.

(3) A provision that starting no later than May 31, 1976, the State of California shall require those light-duty vehicles of 1974 model year and earlier, which are able to operate on 91 RON gasoline, to be retrofitted with an oxidizing catalytic converter.

(4) Method and proposed procedures for ensuring that those installing the retrofits have the training and ability to perform the needed tasks satisfactorily and will have an adequate supply of retrofit components.

(d) After May 1, 1977, the State shall not register or allow to operate on its streets or highways any light duty vehicle which does not comply with the applicable

standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After May 1, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle which does not comply with the applicable standards and procedures implementing this section.

(f) The State of California shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section, including the text of needed statutory proposals and needed regulations which it will propose for adoption. The compliance schedule shall also include a date by which the State shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1975.

(g) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. A State will be considered to have failed to comply with the requirements of this regulation if it fails to timely submit the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

[FR Doc. 73-13033 Filed 6-29-73; 8:45 am]

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[40 CFR Part 52]

### ARIZONA

#### Approval and Promulgation of Implementation Plans

*Background.* In accordance with an order of the U.S. Court of Appeals for the District of Columbia Circuit, several States were required to submit transportation control plans on April 15, 1973. Most State plans submitted on April 15 relied on extensive use of common control measures such as inspection/maintenance and installation of retrofit emission control devices. As a result of EPA evaluation of the State plans, applicability, effectiveness, and minimum time required for complete implementation of the control strategies on a nationwide basis were established. After reviewing the Arizona plan in light of the data consolidated from the evaluation of all State plans, the Administrator concluded that the plan was partially approvable. Namely, the strategy for attainment of the national standard for photochemical oxidants was approved while the attainment of the carbon monoxide standards was not approved. The evaluation of the Arizona plan is available for inspection at U.S. Environmental Protection Agency, Region IX, 100 California Street, San Francisco, California 94111, and the U.S. Environmental Protection Agency, Freedom of Information Center, Room 329, 401 M Street SW., Washington, D.C. 20460.

Since the Administrator disapproved a portion of the Arizona transportation plan, the Administrator is required, under section 110(c) of the Act, to propose and subsequently promulgate regulations setting forth a substitute portion of such plan. Proposed regulations for the attainment and maintenance of the national standards for carbon monoxide are herewith proposed.

### PUBLIC HEARINGS

The Administrator will hold public hearings on the proposed regulations in order to provide the general public ample opportunity to comment. Two hearings will be held in Arizona as follows: in Phoenix on August 6, 1973, at 9:30 a.m. in the Phoenix Civic Plaza Flagstaff Room, 225 East Adams Street, and in Tucson on August 8, 1973, at 9:30 a.m. in the Tucson Community Center Theater, 260 Church Street. Persons wishing to participate in the hearing are requested (but not required) to submit three copies of their statements at least five days prior to the date of the hearing to: Cassandra Dunn, Regional Counsel, U.S. Environmental Protection Agency, Region IX, 100 California Street, San Francisco, California 94111.

### SUMMARY

Studies by the Agency indicate that a reduction on the order of 54 percent would be necessary in projected 1975 emissions of carbon monoxide in order to attain the national primary ambient air quality standards in the Phoenix-Tucson Intrastate Region. It should be noted that a reduction of 68 percent would have been necessary to attain the standards in 1971. The difference in the needed reductions is due to control measures on stationary sources submitted by the State and already approved, and reductions achieved through reduced automobile emissions resulting from the Federal Motor Vehicle Control Program. The Administrator will herewith propose control measures to show attainment, but the Administrator has concluded that an extension of the deadline for achieving the standards to 1977, under section 110(e) of the Act, is justified because the necessary technology or other alternatives are not available and will not be available soon enough to permit full compliance. In reaching this conclusion, the Administrator has considered and applied as part of the plan reasonably available alternative means for attaining the primary standards. The control measures proposed herein reflect what

EPA considers to be the most feasible approach for meeting the national standards in the Region. However, these measures are subject to change prior to promulgation as a result of written comments, testimony presented at the public hearings or further study by EPA.

The Administrator recognizes the commitment the State of Arizona has made to periodic vehicle inspection and retrofit of emission control devices for light-duty vehicles and commends the State's efforts and progress in their development. Even though the Administrator finds that the plan submitted by the State of Arizona does not provide sufficient emission reduction, these individual control measures are acceptable means for reducing vehicle emissions. Therefore, the Administrator is proposing these measures, in accordance with the schedule set forth in the State's plan, supplemented by additional controls. The additional controls include reasonable and apparently available means of reducing carbon monoxide. These means include bus/carpool lanes on freeways and major streets, reduction in off-street public parking, and limitations on the construction of additional parking facilities, supplemented by the required availability of computer-aided carpool and bus matching system. The intent of these measures is to reduce VMT (vehicle miles traveled) by discouraging individual use of private vehicles and encouraging use of carpools and existing transit systems, and to stimulate new and/or expanded transit systems. These control measures will be implemented prior to 1975. Less attractive and more severe measures are ultimately required to show attainment by 1977. These are also proposed and would be instituted in 1974 and fully implemented by May 31, 1977. These measures include a ceiling on further increases in gasoline consumption beyond 1973 levels accompanied by a limit on motorcycle registration to the projected 1975 level. The primary guideline the Agency has used in proposing these control measures for VMT reduction is that sufficient alternative transportation capacity is presently or potentially available in the metropolitan area of the Phoenix-Tucson Region to achieve a 10-15 percent

VMT reduction by 1975 with an additional similar reduction by 1977.

The Agency also encourages close examination of such measures as replacement of on-street parking with bicycle lanes on major streets, fare reduction, provision of a jitney service and use of mini-buses, fringe parking lots for transfer to buses and carpools, special parking privileges for carpools, on-street parking prohibition for non-residents, State taxes to encourage VMT reduction or to raise revenue to benefit mass transit, and provision of bus tokens in place of free parking privileges.

The Administrator encourages the State to adopt and resubmit transportation control strategies identical or equivalent to the strategies proposed below together with an adequately documented justification for an extension of the attainment date for the carbon monoxide standards.

#### STATE AND LOCAL IMPLEMENTATION OF CONTROL MEASURES

In order to preserve the intent of the Clean Air Act whereby local pollution problems will be dealt with primarily at the local level, the Agency will require State and local governments to take action wherever possible, and will not involve the Federal government in the administration of local programs and in direct enforcement against individual citizens. Requirements of this sort are applicable to bus/carpool lanes, motorcycle control, public parking facilities, inspection/maintenance, retrofit, and gas limitations. Appropriate governments will also be required to submit compliance schedules for these programs, with complete details for their implementation.

If the State submits adequate control measures or substitute control measures which will achieve comparable reductions in pollution, then the Administrator can approve the State's measures rather than promulgate his own. However, the requirement to submit adequate compliance schedules and take other actions will be enforced on a timely basis if the Agency's measures are promul-

gated. Therefore, it is suggested that plans to comply with these measures not be delayed.

#### REVISED CONTROL STRATEGIES

The State of Arizona is proceeding with a mandatory periodic vehicle inspection for light-duty vehicles which, if implemented as planned, will serve as an outstanding example of a loaded emission test for other States. In addition, the State has proposed to investigate mandatory inspections of motorcycles and heavy-duty vehicles. The proposal herein will require mandatory periodic vehicle inspection for light-duty vehicles only. EPA does not currently have information on the effectiveness or time required for implementation of an inspection program for heavy-duty vehicles and, therefore, cannot propose this control measure. Catalytic converters would be required in 1976-77 for many vehicles in the 1968 through 1974 model years. It is estimated that catalytic converters can only be retrofitted on 20 percent of the 1968-1970 vehicles and 75 percent of the 1971-1974 vehicles because of potential lubricity and octane problems associated with the use of 91 octane lead-free fuel. It cannot be concluded at present that the technology for retrofit converters has developed to the point that they could be installed effectively as retrofit devices in 1975. However, the Agency will monitor the status of development of this technology and accelerate the dates if feasible. This strategy was an acceptable control measure in the plan submitted by Arizona. Another retrofit control measure will be the requirement for retrofit of air bleed devices on many pre-1968 light-duty vehicles. This retrofit measure was also an acceptable control measure in the proposed Arizona plan.

The remainder of the strategies proposed are directed toward a 32 percent reduction in VMT by light-duty vehicles which would be accomplished by 1977. A 10-15 percent VMT reduction can be achieved by 1975 by increasing the occupancy factor for work-oriented trips by 50-75 percent. The present estimated occupancy factor is

1.2 persons per vehicle. The goal would be to raise this factor to between 1.8 and 2.1 persons per vehicle for work-oriented trips. (These estimates are based on the estimate that 40 percent of urban travel is work-oriented, as stated in the Maricopa Association of Government report, "Transit and the Phoenix Metropolitan Area.") This is proposed to be accomplished by bus/carpool lanes on freeways and major streets, reductions in off-street public parking, and limitations on the construction of additional parking facilities, supplemented by the required availability of computer-aided bus and carpool matching system. The measures proposed herein will require conversion of some motor vehicle lanes on all major streets and highways, and it is expected that a widespread network of bus/carpool lanes will provide substantial incentive to the use of buses and carpools while making private vehicle travel by single drivers relatively less attractive. Planning for specific motor vehicle lanes is expected to take place at the local level, under the overall requirements herein. Exceptions to or modifications of the broad requirements will be approved when specifically justified. Because sufficient numbers of buses are not presently available to carry the passengers currently using these lanes in private cars, these proposed regulations would reserve the use of these lanes for carpools with three or more persons in each vehicle.

To assist commuters who desire to form carpools, it is proposed to require the availability of a computer-aided bus/carpool matching system. Participation in this program would be voluntary. The system would provide each participant with a listing of names, home locations, and work phone numbers of all other participants whose working hours most nearly match theirs.

Publicly owned off-street parking facilities will be required to reduce their number of parking spaces in an effort to reduce the high number of low-occupancy private vehicles entering the central business districts and other congested areas, and to promote voluntary carpooling and the use of bus transit. Comment is invited on the possibility of extending this control to privately

owned parking facilities, either by outright reductions in spaces or by imposing regulatory fees. Another provision would limit further construction of new parking facilities in the metropolitan area.

It is estimated that the above control measures can achieve a 10-15 percent VMT reduction by 1975. To assure that this VMT is achieved and to achieve an additional 15 percent reduction between 1975 and 1977, it is proposed to limit further increases in gasoline consumption beyond 1972-1973 levels accompanied by a limit on motorcycle registration to the projected 1975 level. Initiation of the gasoline limitation in mid-1974 is expected to have relatively light impact until 1975 due to the reduced demand for gasoline consumption resulting from the aforementioned VMT reduction measures. Subsequent to 1975, the continuing growth in VMT within the Region will be retarded by limiting the continued growth in gasoline consumption. Gasoline consumption has been increasing approximately 6.6 percent per year. It is proposed that distributors not be permitted to deliver to retail outlets any more gasoline than is distributed during the base year of July 1, 1972-June 30, 1975. No requirements will be placed on the individual motorist. The gasoline limitation and motorcycle registration limitation would be eliminated when they are no longer required to maintain the carbon monoxide standards. It is expected that this will occur during the 1977-1980 time period.

In addition, an overall ceiling on the increase in numbers of motorcycles and scooters is proposed to prevent counter-productive shifts from automobiles to motorcycles as a result of gasoline limitation or parking bans. It should be noted that at the time the ceiling on motorcycle registrations would be implemented, motorcycle carbon monoxide emissions would be 14 to 20 times greater than the new 1976 automobile emissions on a grams-per-mile basis. Thus, any shift in usage from automobiles to motorcycles to counter gas limitations would result in a large increase in emissions. In an attempt to remove the ceiling on motorcycle registration, the Agency will evaluate the feasibility of establishing emission standards for new motorcycles and will evaluate the availability of

motorcycle emission control technology for meeting emission standards and for retrofit.

#### COMPILED OF CONTROL STRATEGY EFFECTS

Table I shows the relative importance of each control measure in 1977. Table II shows a compilation of control strategy effects. As can be seen, the national standards for carbon monoxide are attained by 1977.

TABLE I

	Percent
Percentage reduction needed for attainment in 1977 .....	44.5
Amount attributed to control measures:	
Inspection/maintenance .....	8.0
Retrofit devices:	
Oxidizing catalytic converter .....	11.9
Air bleed .....	9.9
VMT reduction .....	9.7
Gasoline/motorcycle limitation .....	9.0
Percentage reduction attained .....	43.5

TABLE II

Source and Control Measures	Emissions and Reductions, tons/day		
	1975	1977	1980
Mobile Source Emissions without Proposed Control Measures	612.7	488.0	338.3
Expected Reductions: Inspection/Maintenance	—48.0	—33.8	
Retrofit Devices			
Oxidizing Catalytic Converter	—72.5	—45.8	
Air Bleed	—60.8	—39.0	
VMT Reduction Measures	—73.6	—59.6	—40.6
Gasoline Limitations *		—54.7	
Motorcycles	14.0	14.0	18.6
Heavy-duty Vehicles	69.9	80.3	98.6
Other (Stationary, Aircraft, etc.)	25.7	28.7	31.5
Total Emissions Remaining	648.4	314.6	327.8
Allowable Emissions for Attainment of CO Standards	333.1	333.1	333.1

\* Gasoline limitation and motorcycle registration limitation are only required between 1974-1975 and 1977 to attain and maintain the CO standard.

### SUBMITTAL OF WRITTEN COMMENTS

Interested persons may participate in this rule making by submitting written comments, preferably in triplicate, to the Regional Administrator, EPA, 100 California Street, San Francisco, California 94111. All relevant comments received within 30 days of this date will be considered. Receipt of comments will be acknowledged, but substantive responses to individual comments will not be provided. Comments received will be available for public inspection at the Regional Office. Copies of the proposal will also be available for inspection at the following locations: Arizona Division of Air Pollution Control, 1740 W. Adams Street, Phoenix, Arizona, 85007, and the Pima County Air Pollution Control Division, 151 West Congress Street, Tucson, Arizona 85701. The final promulgation of regulations for the Phoenix-Tucson Intrastate Region will take place on August 15, 1973. This notice of proposed rule making is issued under the authority of section 110(c) and section 301(a) of the Clean Air Act.

(42 U.S.C. 1857c-5)

Dated: July 6, 1973.

ROBERT W. FRI,  
*Acting Administrator.*

It is proposed to amend Part 52 of Chapter 1, Title 40, of the Code of Federal Regulations as follows:

#### Subpart D—Arizona

1. Subpart D is amended by adding §§ 52.136, 52.137, 52.138, 52.139, 52.140, 52.141, 52.142, 52.143, and 52.144 as follows:

##### § 52.136 Gasoline limitations.

- (a) Definitions:

(1) The term "base year" means the consecutive 12-month period commencing on July 1, 1972, and ending June 30, 1973.

(2) The term "distributor" means any corporation, partnership, or sole proprietorship which transports or stores or causes the transportation or storage of gasoline between any refinery and any retail outlet.

(3) The term "retail outlet" means any establishment at which gasoline is sold or offered for sale to the public, or introduced into any vehicle.

(b) This section is applicable in the Phoenix-Tucson Intrastate Air Quality Control Region (hereafter referred to as the Region), to all distributors of gasoline to any retail outlet in this area and to the owners or operators of all retail outlets in this area.

(c) Beginning July 1, 1974, the State of Arizona shall implement regulations limiting the total gallonage delivered to retail outlets in the Region to the amount delivered to such outlets during the base year.

(d) In order for the State to determine the amount of gasoline delivered during the base year and years during which control is in effect, all distributors to which this section applies shall provide the State with a detailed accounting of the amount of gasoline delivered to each retail outlet in the Region during the base year and years during which control is in effect. For each year during which control is in effect, the owner or operator of each retail outlet to which this section applies shall provide the State with a detailed accounting of gasoline received from each distributor, including the total amount of gasoline received from each distributor, the total amount of gasoline sold during the year, and the amount of gasoline on hand at the beginning and end of the year. The State may require any other reports as it may deem necessary for the implementation of this section.

(e) The State of Arizona shall submit no later than October 1, 1973, a detailed compliance schedule showing steps it will take to establish and enforce the limitation program specified in paragraphs (c) and (d) of this section, including:

(1) The text of needed statutory proposals and needed regulations which it will propose for adoption.

(2) A date by which the State shall adopt procedures to ensure that no more than the amount of gasoline specified in paragraph (c) of this section is delivered to retail outlets in the Region. Such date shall be no later than March 30, 1974.

(3) A date by which any report necessary for establishing such procedures will be furnished to the State by the distributors. Such date shall be no later than January 1, 1974.

(4) Designation of an agency responsible for implementation and monitoring of this program.

(f) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, a State will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.137 Inspection and maintenance program.

##### (a) Definitions:

(1) "Inspection and maintenance program" means a program to reduce emissions from in-use vehicles through identifying vehicles which need emission control related maintenance and requiring that maintenance be performed.

(2) All other terms used in this section which are defined in Part 51, Appendix N of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the Phoenix-Tucson Intrastate Air Quality Region (hereafter referred to as the Region).

(c) The State of Arizona shall establish an inspection and maintenance program applicable to all light-duty

vehicles which operate on streets or highways over which it has ownership or control. No later than October 30, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Provisions for inspection of all light-duty motor vehicles at periodic intervals no more than one year apart by means of a loaded test.

(2) Provisions for inspection failure criteria consistent with the emission reductions claimed in the plan for the strategy. These criteria shall include failure of 50 percent of the vehicles in the first inspection cycle.

(3) Provisions to ensure that failed vehicles receive the maintenance necessary to achieve compliance with the inspection standards. This shall include sanctions against individual owners and repair facilities, retest of failed vehicles following maintenance, a certification program to ensure that repair facilities performing the required maintenance have the necessary equipment, parts and knowledge to perform the tasks satisfactorily, and such other measures as may be necessary or appropriate.

(4) A program of enforcement to ensure that vehicles are not intentionally readjusted or modified subsequent to the inspection and/or maintenance in such a way as would cause them to no longer comply with the inspection standards. This might include spot checks of idle adjustments and/or a suitable type of physical tagging.

(5) Provisions for beginning the first inspection cycle by July 1, 1975, and completing it by July 1, 1976.

(6) Designation of any agency or agencies responsible for conducting, overseeing, and enforcing the inspection and maintenance program.

(d) After July 1, 1976, the State shall not register or allow to operate on its streets or highways any light-duty vehicle which has not complied with the applicable standards and procedures adopted pursuant to paragraph (c) of this section. This shall not apply to the initial registration of a new motor vehicle.

(e) After July 1, 1976, no owner of a light-duty vehicle shall operate or allow the operation of such vehicle

which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(f) The State of Arizona shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce an inspection and maintenance program pursuant to paragraph (c) of this section, including:

(1) The text of needed statutory proposals and needed regulations which it will propose for adoption.

(2) The date by which the State will recommend needed legislation to the State legislature.

(3) The date by which necessary equipment will be ordered.

(4) A signed statement from the Governor or his designee identifying the sources and amounts of funds for the program. If funds cannot legally be obligated under existing statutory authority, the text of needed legislation will be submitted.

(g) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, the State will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.138 Bus/carpool lanes.

##### (a) Definitions:

(1) "Carpool" means a vehicle containing three or more persons.

(2) "Bus/carpool lane" means a motor vehicle lane on a street or highway open only to buses (or buses and carpools), whether constructed specially for that purpose or converted from existing lanes.

(3) "Major street or highway" means any street or highway which meets the criteria given in paragraphs (b) (4) (ii) or (iii) of this section.

(b) This regulation is applicable in the Phoenix-Tucson Intrastate Air Quality Control Region (hereafter referred to as the Region).

(1) Each incorporated city within the Region shall establish bus/carpool lanes on the major streets and highways over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(2) Each county within the Region shall establish bus/carpool lanes on the major streets and highways within the Region over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(3) The State of Arizona shall establish bus/carpool lanes on the major streets and highways within the Region over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(4) Each of the governmental entities named in paragraph (b) of this section shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps which it will take to establish these bus/carpool lanes and to enforce the limitations on their use, with each schedule to include the following:

(i) Each major street and highway which will have bus/carpool lanes must be identified with a schedule for the establishment of the lanes.

(ii) If a major street or highway has four or more motor vehicle lanes in one direction, at least one of these lanes must be open only to buses (or buses and carpools) at all times. If only one lane is open to buses (or buses and carpools) at all times, a second lane must be open only to buses (or buses and carpools) from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

(iii) If a major street or highway has three motor vehicle lanes in one direction, at least one of these lanes must be open only to buses (or buses and carpools) from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

(iv) In unusual situations, a major street or highway, or a motor vehicle lane or segment thereof, may be exempt from these requirements if an approval of the exemption is obtained from the Administrator. The application for exemption shall not be submitted and will not be accepted after September 1, 1973. Special circumstances justifying the need for an exemption or modification (such as inappropriateness of use by buses, designation of bicycle lanes instead, or desire to allow bus/carpool lanes to be entered briefly by other vehicles for the purpose of crossing a motor vehicle lane or making a right turn) must be given in detail with the application.

(v) Bus/carpool lanes must be prominently indicated by overhead signs at least once every mile, and at each intersection or entry ramp. Of the bus/carpool lane mileage for each of the governmental entities, 25 percent must be established and needed signs must be installed by March 1, 1974; 50 percent by June 1, 1974; 75 percent by September 1, 1974; and 100 percent by December 1, 1974.

(vi) Bus/carpool lanes must be prominently indicated by distinctive painted lines, pylons, or physical barriers.

(vii) A signed statement by the chief executive officer of each governmental entity or his designee shall identify the sources and amounts of funds for all projects.

(5) Buses shall have the right-of-way whenever changing lanes on major streets and highways with bus lanes. This shall take effect as each bus/carpool lane is established and identified.

(6) Buses shall be permitted to make left turns whether or not the intersection is posted for "No Left Turn" (except when a one-way street would be entered from the wrong direction). This shall take effect January 1, 1974.

(7) None of the governmental entities named in paragraph (b) of this section shall convert existing on-street parking spaces to use as motor vehicle lanes unless the effect will be to increase the number of bus/carpool lanes on the affected street beyond the number otherwise re-

quired by paragraph (b) of this section, or unless the effect will be to create a bicycle lane in place of the parking spaces.

(c) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, a governmental entity will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.139 Management of parking supply.

##### (a) Definitions:

(1) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land to use as a parking facility.

(2) "Modification" means any change to a parking facility which increases the vehicle capacity of such facility.

(3) "Enlargement" means any physical change or addition to a parking facility which increases the vehicle capacity of such facility.

(4) "Commenced" means that an owner or operator has undertaken a continuous program of construction, modification, or enlargement.

(5) "Parking facility" (also called "facility") means any facility, building, structure, or lot or portion thereof used primarily for temporary storage of motor vehicles.

(b) This regulation is applicable in the Phoenix-Tucson Intrastate Air Quality Control Region (hereafter referred to as the Region).

(c) No person, after August 15, 1973 shall commence construction of any new parking facility or modification or enlargement of any existing parking facility until he has first received from the Administrator or from an agency approved by the Administrator a permit stating

the construction, modification or enlargement of such facility will not interfere with the attainment or maintenance of applicable Federal air quality standards.

(d) In order for any agency to be approved by the Administrator for purposes of issuing permits for construction of any new parking facility or any modification or enlargement of any existing parking facility, such agency shall demonstrate to the satisfaction of the Administrator that:

(1) Requirements for permit applications and issuance have been established. Such requirements shall include, but not be limited to, a requirement that before a permit may be issued, the following findings of fact or factually supported projections must be made:

(i) The location of the facility.

(ii) The total motor vehicle capacity before and after the construction, modification, or enlargement of the facility.

(iii) The normal hours of operation of the facility and the enterprises and activities which it serves.

(iv) The number of people using or engaging in any enterprises or activities which the facility will serve.

(v) The number of motor vehicles using the facility on an average hourly basis and a peak hour basis.

(vi) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projections shall include data concerning the availability of public transit from such areas.

(2) Criteria for issuance of permits have been established and published. Such criteria shall include, but shall not be limited to:

(i) Full consideration of all facts contained in the application.

(ii) Provisions that no permit shall be issued if such permit will result in the increase of VMT within any area, the air quality of which fails to meet applicable Federal air quality standards.

(3) Agency procedures provides that no permit for the construction, enlargement or modification of a parking facility covered by this section shall be issued without notice and opportunity for public hearing. The public hearing may be of the legislative type; the notice shall conform to the requirements of § Part 51.4(b) of this chapter; and the Agency rules of procedure may provide that if no notice of intent to participate in the hearing is received from any member of the public (other than the applicant) prior to 7 days before the scheduled hearing date, no hearing need be held. If notice of intent to participate is required, that fact shall be noted prominently in the required notice of hearing.

#### § 52.140 Limitation of public parking.

(a) The term "off-street parking facility" means any land or building or portion of a building set aside for the purpose of storing a maximum capacity of 10 or more vehicles on a temporary basis.

(b) Each governmental entity or public agency owning or operating an off-street parking facility located within the Phoenix-Tucson Intrastate Air Quality Control Region shall, by October 1, 1973, report to the Administrator the number of parking spaces in each such facility under its ownership or control. The number used solely for the storage of vehicles of persons who reside within  $\frac{1}{4}$  mile of the facility shall not be counted.

(c) Each such owner or operator of any off-street parking facility located within the area specified in paragraph (b) of this section shall reduce the number of affected parking spaces in each such facility from the number in existence as of October 1, 1973, according to the following schedule:

By January 31, 1974—a reduction of 5 percent

By July 31, 1974—a reduction of 10 percent

By December 31, 1974—a reduction of 15 percent

By April 30, 1975—a reduction of 20 percent

(d) Each such owner or operator of an off-street parking facility subject to the requirements of paragraph (c)

of this section shall submit to the Administrator, no later than October 31, 1973, a detailed compliance schedule showing the steps it will take to achieve the required reduction in parking spaces. Such schedule shall provide for the marking in some manner obvious to the public (such as painting over, roping off, or the like) of the eliminated spaces on which parking is not permitted pursuant to this section.

(e) Failure to submit a compliance schedule as required by this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. Any owner or operator of an off-street parking facility who allows any vehicle to be parked on any parking space which has been eliminated pursuant to this section, or who fails to mark clearly those spaces which have been eliminated, shall likewise be in violation and subject to enforcement.

#### § 52.141 Motorcycle limitation program.

##### (a) Definitions:

(1) "Motorcycle" means any self-propelled two or three-wheeled motor vehicle capable of carrying one or more persons.

(2) "Registration" means the action of a State allowing a vehicle to be operated on the streets and highways in that State during a defined period of time.

(3) "Registration period" means that period of time for which a vehicle is allowed to be used within the State.

(b) This section is applicable in the Phoenix-Tucson Intrastate Air Quality Control Region (hereafter referred to as the Region).

(c) As of January 1, 1975, or during any registration period which commences in the calendar year 1975, the State of Arizona shall not register in the Region more motorcycles than the total number of motorcycles projected for that period based on ordinary growth trends in

the period 1971-1974. This requirement shall remain in effect until July 1, 1977.

(d) After July 1, 1974, no person shall operate on the streets and highways of the State within the Region any motorcycle which is not validly registered by the State of Arizona or by another State.

(e) No later than October 1, 1973, the State shall submit a detailed compliance schedule showing the steps it will take to implement and enforce these requirements, and the text of needed statutory proposals and needed regulations which it will propose for adoption. Each schedule shall also include the following:

(1) A date by which the State will adopt procedures necessary to limit the number of motorcycles registered as required by paragraph (c) of this section.

(2) Proposed procedures to ensure that no motorcycle will be registered by the State in a county other than that of the owner's legal residence.

(3) A date by which such procedures will go into effect. Such date shall be no later than July 1, 1974.

(f) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, the State will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.142 Oxidizing catalyst retrofit.

##### (a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of the vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbons and carbon monoxide from that vehicle.

(2) All other terms used in this section which are defined in Part 51, Appendix N of this chapter, are used herein with the meanings so defined.

(b) This section is applicable to the Phoenix-Tucson Intrastate Air Quality Control Region.

(c) The State of Arizona shall establish a retrofit program to ensure that on or before May 1, 1977, gasoline-powered light-duty vehicles of model years 1968 through 1974, subject under presently existing legal requirements to registration in the area defined in paragraph (b) of this section, are equipped with an appropriate oxidizing catalyst retrofit device. No later than October 30, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use on vehicles subject to this section.

(2) Designation of an agency responsible for ensuring that the provisions of subparagraph (3) of this paragraph are enforced.

(3) A provision that starting no later than May 31, 1976, the State of Arizona shall require those light-duty vehicles of 1974 model year and earlier which are able to operate on 91 RON (research octane number) gasoline to be retrofitted with an oxidizing catalytic converter. The installation shall be completed by May 31, 1977.

(4) A method and proposed procedures for ensuring that those installing the retrofits have the training and ability to perform the needed tasks satisfactorily and will have an adequate supply of retrofit components.

(d) After June 1, 1977, the State shall not register or allow to operate on its streets or highways any light-duty vehicle which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After June 1, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle which does not comply with the applicable standards and procedures implementing this section.

(f) The State of Arizona shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section, including the text of needed statutory proposals and needed regulations which it will propose for adoption. The compliance schedule shall also include a date by which the State shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1975.

(g) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. A State will be considered to have failed to comply with the requirements of this regulation if its fails to timely submit the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.143 Air bleed to intake manifold retrofit.

##### (a) Definitions:

(1) The term "air bleed to intake manifold retrofit" as used in this section means a device in the intake system of the vehicle which enables the air/fuel ratio to be increased by metering additional air to the intake manifold in accordance with intake manifold vacuum advance to reduce emissions of hydrocarbons and carbon monoxide to the atmosphere.

(2) All other terms used in this section which are defined in Part 51, Appendix N of this section, are used herein with the meanings so defined.

(b) This section is applicable in the Phoenix-Tucson Intrastate Air Quality Control Region.

(c) The State of Arizona shall establish a retrofit program to ensure that on or before June 30, 1976, all gasoline-powered light-duty vehicles of model years prior to 1968, subject under presently existing legal requirements to registration in the area defined in paragraph

(b) of this section, are equipped with an appropriate air bleed to intake manifold device. No later than March 1, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use on vehicles subject to this section.

(2) Designation of any agency responsible for ensuring that the provisions of paragraph (c)(4) of this section are enforced.

(3) Provisions for beginning the installation of the air bleed devices by July 1, 1975, and installation of the devices on all vehicles subject to this section no later than June 30, 1976.

(4) A provision that starting no later than June 30, 1975, no vehicle of which retrofit is required under this section passes the annual emission tests provided for by § 52.137 unless it has been first equipped with an approved air bleed to intake manifold device which the test has shown to be installed and operating correctly. The regulations shall include test procedures and failure criteria for implementing this provision.

(5) Method and proposed procedures for ensuring that those installing the retrofit devices have the training and ability to perform the needed tasks satisfactorily and will have an adequate supply of retrofit components.

(d) After June 30, 1976, the State shall not register or allow to operate on its streets or highways any light-duty vehicle which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After June 30, 1976, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle which does not comply with the applicable standards and procedures implementing this section.

(f) The State of Arizona shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit

program pursuant to paragraph (c) of this section, including the text of statutory proposals and regulations which the State proposes for adoption. The compliance schedules shall also include a date by which the State shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1974.

(g) Failure to comply with any provision of this section shall render each person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. A State will be considered to have failed to comply with the requirements of this regulation if it fails to timely submit the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.144 Bus/carpool computer matching system.

##### (a) Definitions:

(1) "Bus/carpool matching" means assembling lists of commuters sharing similar travel needs. The number of commuters on each list identifies potential bus/carpools.

(2) "Time-origin-destination (TOD) information" means information that identifies a commuter's work schedule, home and work location.

(3) All other terms used in this section which are defined in Part 51, Appendix N, of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the Phoenix-Tucson Intrastate Air Quality Control Region (hereafter referred to as the Region).

(c) Beginning March 1, 1974, the State of Arizona shall establish a computer-aided bus/carpool matching system which is conveniently available to all employees in businesses having more than 10 employees within the Region who operate light-duty vehicles on streets or highways over which it has ownership or control. No later than December 1, 1973, the State shall submit le-

gally adopted regulations to EPA establishing such a system. The regulations shall include:

(1) A method of collecting information which will include the following as a minimum:

(i) Provisions for each affected employee receiving an application form with a cover letter describing the matching program.

(ii) Provisions on each application for applicant identification of time, origin, and destination, and the applicant's desire to drive only, carpool only, or share driving.

(2) A computer method of matching information that will have provisions for locating each applicant's origin and destination within a grid system in the urban area and semi-rural region surrounding the Phoenix and Tucson metropolitan areas and matching applicants with identical origin and destination grids and compatible work schedules.

(3) A method for providing continuing service such that the master list of all applicants is retained and available for use by new applicants; applications are currently available; and the master list is periodically updated to remove applicants who have moved from the area served.

(4) An agency or agencies responsible for operating, overseeing and maintaining the bus/carpool computer matching system.

(d) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act.

[FR Doc. 73-14266 Filed 7-13-73; 8:45 am]

\* \* \* \* [40 CFR Part 52]

## CALIFORNIA

### Approval and Promulgation of Implementation Plans

This notice of proposed rulemaking sets forth transportation control plans for the following California Intrastate Regions (hereafter referred to also as Regions): San Francisco Bay Area, Sacramento Valley, San Diego, San Joaquin Valley, and Southeast Desert. A Federally proposed plan for the Los Angeles Intrastate Region was announced on January 15, 1973, and a revision of that plan was announced on June 15, 1973.

### BACKGROUND

On May 31, 1972, the State of California was granted, pursuant to section 110(e) of the Act, an extension of 2 years for the attainment of the national standards for photochemical oxidants (hydrocarbons) in the San Francisco Bay Area, Sacramento Valley, and Southeast Desert Intrastate regions and for carbon monoxide in the Sacramento Valley intrastate Region.

In accordance with the court decision on the NRDC v. EPA suit, this extension was rescinded and California was directed to submit a transportation strategy by April 15, 1973, that would provide for the attainment and maintenance of the standards as noted above by May 31, 1975. The court required each of the states that had originally been given an extension of time for submitting transportation control plans to submit such a plan by April 15, 1973, for each region that required it, and required the Administrator to approve or disapprove such plans by June 15, 1973. The court also ordered each of the 2-year extensions that had been granted for achieving the standards for automobile-related pollutants in these regions to be rescinded, with the proviso that they

could be granted again if, on reexamination, EPA concluded that each of the statutory tests had been met.

In addition, California was directed to submit a transportation strategy for photochemical oxidants (hydrocarbon) in the San Diego and San Joaquin Valley Intrastate Regions and for carbon monoxide in the San Francisco Bay Area, San Diego, and San Joaquin Valley Intrastate Regions. The Administrator disapproved those portions of the California plan that were required to be submitted. That disapproval was announced on June 15, 1973, and published in the *FEDERAL REGISTER* on June 22, 1973. The disapproval was based solely upon the lack of timely submittal of California's plan. The Environmental Protection Agency, will, when the plan is received, acknowledge its receipt in the *FEDERAL REGISTER* and will provide opportunity for the public to comment on the plan. After evaluation of the plan that is to be submitted by the State and consideration of all comments, this notice of proposed rule making will be revised accordingly. A transportation control plan will be promulgated by the Administrator if the State fails to submit its own plan. Upon submission of an acceptable plan by the State, the EPA plan, or portions thereof, will be rescinded.

#### SUMMARY

Studies available to the Administrator at present indicate that a significant reduction of reactive hydrocarbons will have to occur in all regions covered by this proposal if the ambient air quality standards for photochemical oxidants are to be attained. In all cases, the controls proposed will affect the required reduction in reactive hydrocarbons; attainment of the oxidant standards will ensure attainment of the carbon monoxide and nitrogen oxide standards as well.

The proposed control measures reflect what EPA considers to be the most feasible approach for meeting the national standards in each region. However, these measures are subject to change prior to promulgation as a result of written comments, testimony presented at the public hearings, or further study conducted by EPA.

Much of the reduction in photochemical oxidant levels will result from measures submitted by the State and already approved, but these measures are not enough to meet the standards. The Administrator has concluded that an extension of the deadline for achieving the standards to 1977 under section 110(e) of the Act is justified because the necessary technology or other alternatives are not available and will not be available soon enough to permit full compliance. The extension applies to all Regions covered by this proposal for photochemical oxidants and for carbon monoxide. In reaching this conclusion, the Agency has considered, and applied as part of its plan, reasonably available alternative means of attaining the primary standard.

The plan set forth herein provides for the application of the requirements to all emission sources other than motor vehicles not later than May 31, 1975, as required by section 110(e)(2)(A), and provides for the application of reasonable interim measures for control of motor vehicle emissions prior to 1977.

Most of the plan utilizes reasonable and apparently available means of reducing photochemical oxidants, carbon monoxide, and nitrogen dioxide, including requirements for establishing bus and car-pool lanes on freeways and major streets. Other measures, to be required prior to 1975 in most cases, include: reductions in off-street public parking; limits on the construction of additional parking facilities; limitations on motorcycles; mandatory inspection and maintenance of light-duty vehicles; and the prevention of further increases in gasoline consumption.

Portions of the plan utilize measures which appear reasonable but do not appear to be applicable by 1975 because of technical problems related to devices such as catalytic retrofits. These measures will be required beginning in 1976, with full implementation to be achieved by 1977; they will be required earlier if they become available. Even if all the reasonable measures mentioned above are imposed, it is possible that the national standards for photochemical oxidants will not be met in the

Regions by 1977 except in the San Joaquin Valley. Under the Clean Air Act, the Agency has no choice but to include in the plan a measure which can achieve the standards by 1977 even if it appears impractical and unworkable. Consequently gasoline limitations of whatever degree necessary have been included for 1977. If implemented, these limitations would achieve the standards for photochemical oxidants; however, the Agency will utilize every means available to avoid imposing impractical measures in order to meet the standards by 1977. It should be noted that grounds for a 1-year extension of the compliance date for certain sources under section 110(f) of the Clean Air Act may arise so that certain requirements of this plan may not be imposed until May 31, 1978.

#### NEED FOR MASS TRANSIT

The development of large-scale mass transit facilities in each Region is essential to any effort to reduce automotive pollution. The planning, acquisition, and operation of mass transit systems is and should remain a local responsibility. However, the automobile problem does not follow the boundaries of counties or cities. Current planning and operating agencies for mass transit do not appear to have sufficient authority to provide for adequate public transit with the notable exception of the San Francisco Bay Area's Metropolitan Transportation Commission. Consequently, the Environmental Protection Agency strongly endorses the concept of a region-wide transportation planning and operating authority.

The Agency also actively encourages the immediate large-scale purchase of additional public transportation facilities, specifically, additional buses, and encourages further examination of the feasibility of rail transit. To create conditions conducive to rapid bus transit, several of the measures in this plan give preferential treatment to buses. The Agency also encourages close examination of such measures as fare reductions; provision of jitney service; provision of more minibuses; fringe parking lots for buses and car pools; special parking privileges for

car pools; on-street parking prohibition for nonresidents; State taxes to encourage reductions in vehicle miles of travel (VMT) while raising revenue to benefit mass transit; provisions for establishment of additional bicycle lanes throughout the metropolitan areas such as this proposal sets forth; and provisions for free bus tokens in place of free parking privileges.

#### STATE AND LOCAL IMPLEMENTATION OF CONTROL MEASURES

In order to preserve the intent of the Clean Air Act that pollution problems be dealt with primarily at the local level, the Agency will require State and local governments to take action wherever possible, and will not involve the Federal Government in the administration of local programs or in direct enforcement against individual citizens. Requirements of this sort are proposed with regard to expansion of a State motor vehicle retrofit program and establishment of bicycle lanes, bus/car-pool lanes, motorcycle control, public parking facilities, inspection/maintenance programs and gas limitations. Appropriate governmental entities will be required to submit compliance schedules for these programs with complete details on their implementation.

If the State submits adequate control measures in any of these areas or substitute control measures which will achieve comparable reductions in pollution, then the Administrator can approve the State's measures rather than promulgating his own. However, the requirements to submit adequate compliance schedules and take other actions will be enforced on a timely basis if the Agency's measures are promulgated. Therefore, it is suggested that plans to comply with these measures not be delayed.

#### PROPOSED MOBILE SOURCE CONTROLS

##### MODERATE VMT REDUCTIONS

EPA is proposing moderate VMT reduction measures in several regions to facilitate achievement of the standards.

The information available is incomplete. It is as true today as it was a year ago that, "states have had practically no experience with transportation control measures as a means of dealing with air quality problems." Nobody really knows what the public response to significant measures to reduce VMT will be. The studies that have been made on this point are inadequate and necessarily hypothetical until the measures have actually been put into effect. In addition, public attitudes in major urban areas appear to be changing and becoming less favorable to the continued use of automobiles on the present scale. Finally, even the question of the ability of different modes of transportation to accommodate the passengers diverted from automobiles as a result of significant VMT reductions will vary greatly with the individual region. No firm projection of what alternative transportation is available can be made without a detailed traffic study of each individual region, and, for the most part, such studies have not been made.

It is clear, however, that the authors of the Clean Air Act Amendments of 1970 anticipated that substantial VMT reductions might be necessary to achieve the standards. The Senate Report on the Act states that until the vehicle population is largely made up of cars that meet the 1975-76 standards, "as much as seventy-five percent of the traffic may have to be restricted in certain large metropolitan areas if health standards are to be achieved within the time required by this bill." It is also clear from the January 31, 1973, court of appeals opinion that if VMT reduction measures are "reasonably available" by 1975, and if the standards cannot be achieved without them, they must be put into effect. Consequently, it is proposed that the continuing growth in VMT within the air quality control regions covered by this proposal be stopped by limiting the continued growth in gasoline consumption. Gasoline consumption has been increasing by approximately 4.5 percent per year throughout the State of California. It is proposed that distributors not be permitted to deliver to retail outlets any more gasoline than is distributed during the period of July 1972 through

June 1973. No rationing requirement will be placed on individual motorists unless the State of California chooses to do so.

Against this background, EPA has reexamined the question of VMT reduction and has arrived at some conclusions which have influenced the actions being taken. Comment on these is invited, both generally and with respect to specific regions. No significant reduction in the use of private automobiles can be expected to result from measures to increase the attractiveness of other means of transportation, such as buying more buses and improving bus service, building bicycle paths, and, in the long run, building new rail rapid transit systems. Reductions in VMT can only be assured through the use of some form of restraint on or disincentives to vehicle use.

A measure cannot be considered "reasonably available," however, if implementing it would cause severe economic and social disruption. Although some reduction in personal travel could certainly be absorbed without this result, to achieve a significant VMT reduction it will be necessary for the bulk of the travel displaced from single-passenger automobiles to be absorbed by such other modes of transportation as car pools, walking, bicycling, or public transit.

The only significant expansion of public transit facilities that can be accomplished by 1975 is the upgrading and physical expansion of bus services. Much, however, can be done in this regard. Scheduling and service can be improved and optimized. Individual lanes of freeways and other major roads can be set aside for the exclusive use of buses and/or car pools. Significant numbers of new buses can be purchased and put into service by 1975. According to Department of Transportation figures, 2,500 transit buses were sold in this country in 1972, but the transit industry's production capacity is estimated to be more than 6,000 buses a year by 1975. Financial assistance from the Department of Transportation will be available to most communities for improving public transit facilities.

In the California Regions, sufficient alternative transportation capacity is presently or potentially available by

1975 to make reasonable VMT reductions (on the order of 10 to 15 percent) available by 1975. In part, this capacity is contained in present mass transit facilities, or can be created through the expansion of bus service as outlined above. It is also a possibility that many short trips now made by car could be made by bicycle or walking. Car pooling, however, may be the only strategy for reducing VMT which is both implementable by 1975 and capable of substantially reducing emissions without restricting personal mobility. Private automobiles, which are designed to carry four to six persons, carry an average of one and one-half persons per trip in major urban areas, and thus represent the largest unused pool of transportation capacity currently available.

EPA cannot directly require the use of car pools. It can be expected, however, that as measures to make the use of private automobiles less convenient are imposed, increased reliance on car pools will develop naturally as a matter of private initiative. It is proposed herein that the State provide a bus- and car-pool computer matching system to assist employees in establishing bus and car pools.

The measure proposed herein will require conversion of some lanes on major streets and highways for the exclusive use of buses and car pools, and it is expected that such a widespread network of bus/car-pool lanes will provide substantial incentive for use of buses and car pools while making private vehicle travel by single drivers relatively less attractive. Identification of specific lanes is expected to be made at the local level under the overall requirements herein. Exceptions to or modifications of the broad requirements will be approved when specifically justified since it will take some time before sufficient buses are available to carry the passengers currently traveling these lanes in private cars. These proposed regulations would permit the use of the lanes by car pools with three or more persons in the vehicle.

Due to the very high pollution potential of the 2-stroke motorcycles, the regulations herein proposed essentially ban the use of such vehicles during daylight hours in the

summer smog season. The average 2-stroke motorcycle emits approximately 31 times as much exhaust hydrocarbons per mile as will a new California 1975 automobile. Consequently, prevention of increases in the number of motorcycles is proposed to prevent counter-productive shifts from automobiles to motorcycles as a result of other elements of the control strategy. The Agency will evaluate the feasibility of establishing emission standards for new motorcycles and will evaluate the availability of motorcycle emission control technology, including retrofits, for meeting emission standards.

Governmental entities will be required to reduce the number of parking spaces in publicly owned off-street parking facilities in an effort to reduce the number of low-occupancy private vehicles entering the central business districts and other congested areas and to promote voluntary car-pooling and the use of bus transit. Comment is invited on the possibility of extending this control to privately owned parking facilities, either by outright reduction in spaces or by imposing regulatory fees.

#### **INSPECTION AND MAINTENANCE PROGRAMS**

Considerable reductions in motor vehicle emissions can be achieved by requiring all vehicles in an area to be tested annually for emissions, by failing those emitting pollutants that exceed a certain level, and by requiring maintenance on those which fail in order to bring them into compliance. This process is called "inspection and maintenance" throughout this proposal.

Three different types of tests are possible. The car can be tested while running in gear on a treadmill-like device called a "dynamometer" (a "loaded test"); it can be tested while running in neutral (an "idle test"); or certain emission-related engine components can simply be examined to make sure they are in good working order ("parameter" inspection). A loaded test is the most effective and most expensive; parameter inspection is the least effective and least expensive. Since an inspection and maintenance program cannot be expected to achieve

maximum effectiveness in reducing emissions unless a loaded test is adopted, EPA is proposing its adoption.

The State of California is proceeding with a loaded mode inspection system which will result in emission reductions. The proposal herein will require that this inspection system be expanded to require mandatory inspection and maintenance of all light-duty motor vehicles in Regions covered by this proposal. The inspection and maintenance program which the State is currently evaluating and proposing will be applicable to the Los Angeles Intrastate Region only.

#### RETROFITS

Until recently, much of the discussion of transportation control strategies centered on whether it was feasible to require the installation ("retrofit") of additional pollution control devices on motor vehicles currently in use. The most controversial of these devices has been the catalytic converter.

In his decision of April 11, 1973, to suspend the 1975 automobile emission standards for 1 year, the Administrator concluded that the problems involved in attempting to scale-up production of catalytic converters for new cars from near zero to 10 million units in a single model year, combined with the problem of adapting assembly lines to do this work, would probably result in economic dislocation if catalytic retrofits were required. The problems that would be encountered in any attempt to retrofit large numbers of existing vehicles with catalytic mufflers by mid-1975 are far more formidable than those generated by the attempt to put them on new cars.

Far less developmental work has been done on catalytic retrofits than on catalysts for new cars. The construction of production facilities for new-car catalysts has been largely funded by the major auto companies under requirements contracts; no such support has been available where retrofits are concerned. Finally, and most important of all, new-car catalysts would be installed by a few major companies through addition of another process to their assembly lines. To retrofit large numbers of in-use

cars, it would be necessary to get them off the road into many different repair shops and to train a considerable number of mechanics how to install the catalysts once the cars had been made ready to receive them. In light of these difficulties, it is unrealistic to expect that significant progress toward the catalytic retrofit of large numbers of cars can be made by May 31, 1975. Accordingly, EPA is not proposing the retrofit of any vehicles with catalytic mufflers prior to 1975.

Cars with catalysts must be run on lead-free gasoline if the catalyst is to retain its efficiency. Current EPA regulations set forth on January 10, 1973 (38 FR 1254), provide for such gasoline to be made generally available by the beginning of the 1975 model year, but only in a relatively low octane. It is not anticipated that higher octane gasoline with the extremely low lead levels that catalysts require will be generally available by 1977 even if EPA decides that lead in gasoline is a health hazard and should be phased out. Accordingly, it will only be feasible to retrofit catalysts on certain model year cars, since only these models have been designed to run on low-octane gasoline. Catalytic converters would be required in 1976-1977 for many pre-1975 vehicles. It cannot be concluded at present that the technology for retrofit converters has developed to the point that they could be installed effectively by 1975. However, the Agency will monitor the status of development of this technology and will accelerate the date if feasible.

It is proposed that the California nitrogen oxide reduction device program for used cars be expanded. This device consists of a vacuum spark advance disconnect and/or an exhaust gas recirculation system.

This regulation requires application of the State's present program for 1955-1965 model year vehicles to the Sacramento and San Joaquin Regions. The current State program exempts these regions from this retrofit program.

#### STATIONARY SOURCE CONTROLS

Even though in most of the regions covered by this proposal the automobile is by far the major source of

hydrocarbon and carbon monoxide emissions, substantial amounts are also emitted by both major and minor stationary sources. Major sources include oil and gasoline storage facilities and refineries; minor sources, which may be important factors in air pollution because of their numbers, include dry-cleaning shops, gas stations, incinerators, and any place where solvent-based paints are used.

EPA looked first to the reductions that might be achieved by further control of stationary sources for a variety of reasons. The nature of the controls available, their cost, and their effectiveness are relatively well known, and both States and EPA have had significant experience in enforcing similar measures. It can be predicted with confidence that none of these measures will cause any noticeable economic or social disruption. Since almost without exception they will be limited to requiring commercial enterprises to make investments or changes in their modes of operation, the only effect is likely to be some rise in the price of the goods or services produced by the affected enterprises.

Regulations are herein proposed to further limit emissions from stationary sources. They include requiring installation of vapor recovery systems at gasoline stations (the San Francisco Bay Area and San Diego Regions already have such a regulation and therefore no such proposal is made for these areas); additional control of dry-cleaning emissions; elimination of certain industrial solvent compounds; improved control on painting operation solvent loss; and additional restrictions on the loss of organic solvents in general industrial use. The Federal regulations dealing with the development by the State of a "complex source" review procedure were promulgated June 11, 1973, by the Environmental Protection Agency. These regulations provide guidelines on the procedure by which the State must review the construction permits of such indirect emission sources as shopping centers, housing complexes, and sports arenas, which in themselves are not major sources of pollution but tend to increase the amount of vehicle traffic in areas

where they are located, and therefore cause an increase in motor vehicle related emissions. The review procedure developed by the State must be submitted to the Environmental Protection Agency by August 15, 1973, for approval. This point source review currently being done by some local districts and the Environmental Protection Agency should further reduce growth-induced emissions.

#### CONTROL STRATEGY FOR THE SAN FRANCISCO BAY INTRASTATE AIR QUALITY CONTROL REGION

The San Francisco Bay Intrastate Region is comprised of all of seven counties, namely Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, and Napa, and portions of two others, southwestern Solano and southern Sonoma. Geographically, the region covers approximately 5,600 square miles and has within its bounds approximately 4.6 million people and 2.7 million motor vehicles. Air Pollution control in the region falls under the jurisdiction of the Bay Area Air Pollution Control District created by the California Legislature in 1955. During 1971, the Region experienced numerous violations of both Federal and State air quality standards. Based upon a linear rollback model and a maximum 1-hour oxidant reading at San Leandro of 0.36 ppm, a 78 percent reduction in reactive hydrocarbon emissions is required [sic] to achieve the ambient air quality standards for photochemical oxidants. Of the total emissions in the Region, 58 percent of the hydrocarbons, 70 percent of the nitrogen oxides, and 96 percent of the carbon monoxide emissions come from mobile sources. Although mobile sources presently account for the majority of the emissions, their control alone will not be sufficient to allow for attainment of national ambient air quality standards. Table I below shows the impact the proposed measures will have on the total emissions in the Region.

TABLE I—SUMMARY OF IMPACT OF CONTROL STRATEGIES IN SAN FRANCISCO BAY REGION IN 1977

<i>Source of pollutant and control measures</i>	<i>Emissions and reductions, tons/day of reactive hydrocarbons</i>
Stationary source emissions without control strategy .....	225
Expected reductions	
1. Gasoline marketing vapor recovery .....	—138
2. Surface coating improvements .....	—23
3. Dry-cleaning controls .....	—4
4. Degreasing controls .....	—10
Stationary source emissions remaining .....	50
Mobile source emissions without proposed control strategy .....	201
Expected reductions	
1. Light-duty motor vehicle inspection and maintenance and catalytic converter retrofit .....	—38
2. Motorcycle controls .....	—17
3. Reduction in private automobile use (20%) .....	—17
Mobile emissions remaining .....	129
Gasoline reduction (additional 64% VMT reduction) .....	—54
Total emissions remaining .....	125
Allowable emissions to attain standards .....	125

Studies available to EPA indicate that a VMT reduction on the order of 20 percent can be achieved by means other than gas rationing. The remainder of the VMT reduction needed will be achieved through gas rationing.

It is hoped that in the process of developing a regional transportation plan, the Metropolitan Transportation Commission will be able to determine the effect of their plan upon the air quality generally, and specifically, upon the miles traveled by automobiles.

#### SOUTHEAST DESERT INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The Southeast Desert Intrastate Region, also known as the Southeast Desert Air Basin, is located in the southeast portion of the State of California. It is comprised of all of Imperial County and the eastern portions of San Bernardino, Riverside, Kern, Los Angeles, and San Diego Counties. Geographically, this Region covers 33,600 square miles and is separated from the coastal regions by a series of mountain ranges. Elevations vary from 235 feet below sea level to 11,000 feet above sea level.

Air quality monitoring stations in the Region, in particular, those in the Coachella Valley, record photochemical oxidant levels up to five times the national ambient air quality standards. The overall 1971 maximum readings in the Region are 0.38 part per million oxidants (recorded in Palm Springs) and 17 parts per million carbon monoxide (recorded in Indio). Using simple rollback and assuming a linear relationship between reactive hydrocarbons and oxidant concentrations, the reductions required to achieve the national standards are 70 percent of the reactive hydrocarbons and 47 percent of the carbon monoxide.

There are significant data which support the hypothesis that air pollution from the Metropolitan Los Angeles Intrastate Region is transported to and contributes substantially to high oxidant levels in the desert areas east of Los Angeles. It is expected that the emission controls proposed by the Administrator, in addition to State and local emission controls for the Metropolitan Los Angeles Region will provide for attainment of the carbon monoxide and photochemical oxidant standards in the Southeast Desert Region by July 1977. Any delay experienced in attaining the oxidant and carbon monoxide standards in the Los Angeles Region will cause a corresponding delay in the attainment of the standards in the Southeast Desert Region.

A discussion of studies relating the air quality in the Southeast Desert Region to that in the Los Angeles Re-

gion can be found in "Development of Emission Control Strategies for Reducing the Air Pollution in Critical California Air Quality Control Regions," prepared under contract for the Environmental Protection Agency and available from the EPA Region IX office at 100 California Street, San Francisco, California 94111.

Because of the dependence of air quality in the Southeast Desert Region upon that in the Los Angeles Region, and because of the very small impact that emissions in the Southeast Desert Region have upon air quality there, no transportation controls are proposed for this Region.

#### TRANSPORTATION CONTROL STRATEGY FOR SACRAMENTO VALLEY INTRASTATE AIR QUALITY CONTROL REGION

The Sacramento Valley Intrastate Region, also known as the Sacramento Valley Air Basin, lies in the center of Northern California, bounded on the west by the Coast Range, on the north and east by the Cascade Range and the Sierra-Nevada Range, and on the south by the San Joaquin Valley. This Region is comprised of portions of 15 counties. Geographically, the Region consists of 21,300 square miles, 1.2 million people, and 840,000 motor vehicles. Air pollution control in the Region falls under the jurisdiction of the local air pollution control districts.

TABLE II—SUMMARY OF IMPACT OF CONTROL STRATEGIES IN SACRAMENTO "REGIONAL AREA" IN 1977

<i>Source of pollutant and control measures</i>	[Emissions and reductions, tons/day of reactive hydrocarbons]
[Statutory source emission without] control strategy .....	40.6
Expected reductions	
1. Gasoline marketing vapor recovery .....	—26.0
2. Surface coating improvements .....	—1.1
3. Dry-cleaning controls .....	—0.7
4. Degreasing controls .....	—1.9
5. State limitations on burning .....	2.1
Stationary emissions remaining .....	8.8

Mobile source emissions without proposed control strategy.....	54.1
Expected reductions	
1. Catalyst retrofit .....	—5.2
2. Inspection/maintenance program .....	—4.1
3. Motorcycle controls .....	—5.9
4. Reduction in private auto use (20%) .....	—5.2
5. Vacuum spark advance program .....	—1.0
Mobile emissions remaining .....	32.7
Gasoline reduction (additional 29% VMT reduction) .....	—7.5
Total emissions remaining .....	34.0
Allowable emissions to attain standards for photochemical oxidants .....	34.5

As in the rest of the State, the local and regional organizations deal primarily with stationary source controls, leaving mobile source controls to the California Air Resources Board.

During the period 1970 to 1972, the Sacramento Valley Region experienced numerous violations of both Federal and State air quality standards. Photochemical oxidants are the predominant problem, and it appears from the limited data evaluated that the problem has increased in recent years, both in number of violations which occur and the maximum oxidant level experienced. Based on a 1-hour maximum oxidant reading during 1971 in Sacramento of 0.24 ppm and using a proportional rollback model, a 67 percent reduction in reactive hydrocarbons would be required to meet the national ambient air quality standards for oxidants. The annual arithmetic means for NO<sub>x</sub> from 1963 to 1971 show that the NO<sub>x</sub> standard has never been exceeded within the given time period. In Sacramento County, mobile sources account for 71 percent of the hydrocarbon, 89 percent of the nitrogen oxides and 88 percent of the carbon monoxide. Since the air quality levels are most severe for Sacramento County, it appears appropriate to attempt to solve the airshed problem by developing a control strategy specifically for Sacramento County and its immediate vicinity. In the Sacramento Valley and San Joaquin Valley Regions, vast areas are sparsely populated but others are

highly urbanized and have high emission densities in comparison with the rural areas.

The Agency has therefore determined that it is appropriate to reduce emissions from the urbanized areas which experience the high pollution levels. The Sacramento Region has been redefined to include only the 6 counties in the immediate vicinity of the City of Sacramento in an area which roughly approximates the Sacramento Regional Area Planning Commission. The following table summarizes the effects of the proposed control strategies. On the basis of very limited current information, no more than 20 percent VMT reduction could be expected to occur under the proposed VMT reduction measures. The remainder of the VMT reduction needed will be achieved through gasoline rationing.

#### TRANSPORTATION CONTROL STRATEGY FOR SAN JOAQUIN VALLEY INTRASTATE AIR QUALITY CONTROL REGION

The San Joaquin Valley Intrastate Region, also known as the San Joaquin Air Basin, consists of all of the Counties of Amador, Calaveras, Fresno, Kings, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tulare, and Tuolumne, and the western portion of Kern County. This Region lies in the southern portion of the Great Valley and extends into the neighboring mountain slopes. It is bounded on the west by the Coastal Range, on the east and south by the Sierra-Nevada and Tehachapi Mountains, respectively, and on the north by the Sacramento Valley Intrastate Region. The Region includes 30,200 square miles of land area and had a population of over 1.6 million people in 1970, which is a 16 percent increase since 1960. Although it contains 19 percent of the State's land area, the Region has only 8 percent of the State's population. National ambient air quality standards have been exceeded in seven cities in the San Joaquin Valley Region: Stockton, Fresno, Bakersfield, Modesto, Visalia, Parlier, and Five Point. Each of the areas surrounding the cities have unique characteristics with regard to air quality, meteorology, stationary sources, population dis-

tribution, and transportation. The transportation control strategy proposed herein recognizes this fact. A thorough analysis was made of Kern County (Bakersfield), Fresno County (Fresno), and San Joaquin County (Stockton). Insufficient data exist for an adequate analysis of Parlier and Five Point (both in Fresno County), but it is expected that the proposed transportation controls as applied to Fresno will be adequate for attainment of the national ambient air quality standards for photochemical oxidants in these two other cities as well.

The table below presents the maximum photochemical oxidant readings in the five counties of concern:

<i>County</i>	<i>Maximum oxidant concentration, ppm</i>
San Joaquin (Stockton) .....	0.20
Kern (Bakersfield) .....	0.22
Fresno (Fresno) .....	0.21
Tulare (Visalia) .....	0.19
Stanislaus (Modesto) .....	0.24

Reductions in emissions of reactive hydrocarbons of up to 65 percent (for Modesto) will be required in these counties by 1977 in order for the air quality standards to be met.

The table below shows the approximate effect that the proposed control strategies will have in Kern County.

TABLE III. SUMMARY OF IMPACT OF CONTROL STRATEGIES IN THE KERN COUNTY PORTION OF THE SAN JOAQUIN VALLEY REGION IN 1977

<i>Source and control measures</i>	<i>Emissions and reductions of reactive hydrocarbons, tons/days</i>
Stationary source emission without proposed control strategy .....	11.3
Expected Reductions	
1. Vapor recovery at gasoline stations .....	-5.8
2. Surface coating restrictions, dry-cleaning controls, and degreasing controls .....	-0.7
Stationary source emissions remaining .....	4.8
Mobile source emissions without the proposed control strategy .....	21.4
Expected reductions	
1. Catalyst retrofit, expansion of State NO <sub>x</sub> program, and mandatory inspection and maintenance .....	-4.2
2. Motorcycle limitations .....	-2.5
3. Reduction in auto usage (23%) .....	-2.4
Mobile emissions remaining .....	12.3
Total emissions remaining .....	17.1
Allowable emissions for attainment of standards for photochemical oxidants .....	17.2

As can be seen from the table for Kern County, a 23 percent VMT reduction is necessary by 1977 for attainment of the standards. In Stanislaus County, a similar situation exists, with a corresponding need for VMT reduction. In Fresno County, present studies indicate that a 16 percent VMT reduction by 1975 would provide for attainment of the standards, with a zero VMT reduction necessary for 1977. In San Joaquin County, a 32 percent VMT reduction is necessary in 1975 for attainment of the standards, but only 8 percent in 1977.

#### TRANSPORTATION CONTROL STRATEGY FOR SAN DIEGO INTRASTATE AIR QUALITY CONTROL REGION

The San Diego Intrastate Region, also known as the San Diego Air Basin, is located in the southwest corner

of the State and consists of the western two-thirds of San Diego County. It is bounded on the east by the summit of the Peninsular Range, on the north by Orange County, on the south and west by Mexico and the Pacific Ocean, respectively. The airshed has a land area of approximately 3,040 square miles, and, as of 1970, a population of some 1.24 million people. It is estimated that the motor vehicle population in 1972 was approximately 715,000. The Region's population is concentrated primarily in the City of San Diego and in the incorporated areas along the coast. The mountainous terrain and frequent inversions hold in pollutants, and the southern California climate provides ample sunshine to aid in the formation of photochemical oxidants. The automobile is presently the dominant mode of transportation, and accounts for the majority of the hydrocarbon and carbon monoxide emissions. Air pollution control in the Region is the local responsibility of the San Diego County Air Pollution Control District. Since the airshed is contained within one county, no additional regional coordinating council is required for stationary source controls. As in the rest of the State, mobile source emission controls are the responsibility of the California Air Resources Board.

The national ambient air quality standards for photochemical oxidants and carbon monoxide have been exceeded in the Region. In 1970, the maximum 1-hour oxidant reading recorded in the Region was 0.40 ppm at the Oceanside station. The use of this oxidant reading for air planning purposes was rejected on the basis that the reading was the result of a unique traffic stoppage caused by highway construction, combined with unusually heavy volume that day. In addition, there is some evidence of pollutant transport into the Region from the Los Angeles Region. The next highest 1-hour oxidant reading that occurred in the Region was 0.32 ppm at the Escondido Station in 1972, and this reading is being used for oxidant air planning purposes. A high 8-hour carbon monoxide reading of 18 ppm recorded in 1972 is being used for carbon monoxide air planning purposes. As in many areas of California, the predominant air

pollution problem is photochemical oxidants. a [sic] review of air quality data for 1970-1972 shows that both oxidant and carbon monoxide standards were frequently exceeded. Both the frequency of violations and the maximum levels of oxidant experienced indicate the need for extensive mobile and stationary source control if the national air quality standards are to be achieved. The oxidant problem is the main obstacle to attainment of the standards.

Recent EPA analysis indicates that emissions must be lowered to the following levels to meet the photochemical oxidant and 8-hour carbon monoxide standards: the reactive hydrocarbon emissions must be lowered to 25 percent of 1972 emission levels in order to meet the oxidant standard, and the carbon monoxide emissions must be lowered to 50 percent of the 1972 emission levels in order to meet the carbon monoxide standard, using proportional rollback.

The majority of the carbon monoxide and reactive hydrocarbon emissions in the Region are attributable to motor vehicles. Information available indicates that, in addition to stringent controls for stationary sources and requirements for limiting the emissions of motor vehicles, a reduction in VMT by gasoline-powered motor vehicles of 45 percent will have to be effected in order to meet the oxidant standard in 1977. It should be pointed out that it is estimated by EPA that one of the proposed technical strategies, catalyst retrofit, cannot be implemented before 1977.

Table IV shows the impact the proposed measures will have on total emissions in the San Diego Region.

TABLE IV—SUMMARY OF IMPACT OF CONTROL STRATEGIES IN THE SAN DIEGO REGION IN 1977

<i>Source and control measures</i>	<i>Emissions and reductions of reactive hydrocarbons, tons/day</i>
Stationary source emissions without proposed control strategy .....	52.5
Expected reductions	
1. Vapor recovery at gasoline stations .....	-31.9
2. Surface coating restrictions, dry-cleaning controls, and degreasing controls .....	-15.8
Stationary emissions remaining .....	4.8
Mobile source emissions without proposed control strategy..	86.4
Expected reductions	
1. Catalyst retrofit, and mandatory inspection and maintenance .....	-14.5
2. Motorcycle limitations .....	-5.8
3. Reduction in VMT (20%) .....	-8.9
Mobile emissions remaining .....	57.2
Gasoline reduction (additional 25% reduction) .....	-11.0
Total emissions remaining .....	51.0
Allowable emissions for attainment of standards for photochemical oxidants .....	51.0

Studies available to EPA indicate that a VMT reduction on the order of 20 percent can be achieved by means other than gas rationing. The remainder of the VMT reduction needed will be achieved through gas rationing.

It is assumed by EPA, and is implicit in the control strategy calculations, that all Federal facilities will comply with State, local Air Pollution Control District, and EPA air pollution emission rules and regulations. Due to the extensive military activities in the San Diego Region and the significant harm to air quality that emissions from these activities could produce, it is particularly important that military vehicles, operations and facilities follow Presidential Executive Order 11507 by conforming to State, local and EPA rules and regulations.

There is presently underway in the San Diego Region a study of possible strategies for meeting the national ambient air quality standards. This study is being conducted by Rand Corporation of Santa Monica, California, and is part of the San Diego Clean Air Project, "Regional Analysis for Meeting Air Quality Standards," being performed by the Integrated Environmental Development Agency under contract number 6704-0270-E. The Clean Air Project is supported by a grant to San Diego County from the Environmental Protection Agency and by a matching contribution from local sources. It is anticipated that the results of this study will be available in time to assist in promulgation of the final EPA plan for the San Diego Region.

The stationary source emissions of hydrocarbons and carbon monoxide projected for 1977 are EPA estimates based on Rand-IREM projections. The Rand-IREM projections used are those that take into account EPA evaluations of hydrocarbon reactivities where possible and the effects of strategies that are now in effect or will be implemented by 1975-77 under the State and San Diego APCD regulations and proposed EPA regulations. It is anticipated that the final Rand-IREM report analysis may provide a basis for the promulgation of more emission reductions and/or cost effective control strategies in the final EPA plan. EPA and representatives of the solvent and paint industries are currently investigating the adequacy of the local air pollution control district regulations exempting certain organic compounds from control. It is anticipated that these regulations (such as Rule 66 of San Diego County) will be re-evaluated prior to 1975 after extensive additional experimental studies.

#### AIRCRAFT EMISSIONS

Emissions from aircraft engines in 1977 are expected to be approximately 30 percent less than the emissions projected by means of current emission factors. This reduction is due to lower-emission engines that are expected to replace and supplement engines currently in use. Although a reduction is anticipated, the emissions from aircraft are still quite significant. For example, in San

Francisco, aircraft emissions are projected to account for 34 tons/day of reactive hydrocarbons in 1977. The total allowable emissions of reactive hydrocarbons from all sources must be less than 125 tons/day if the national standards for oxidants are to be achieved. Aircraft emissions therefore will account for 27 percent of the allowable emissions in 1977.

Studies have indicated that modification of ground and flight procedures can result in reduced emissions but, the Federal Aviation Administration asserts implementation of these procedures may affect safety. This requires further investigation, and EPA is funding on this matter. There are also other means for reducing aircraft emissions, such as limiting the number of takeoffs and landings and/or percentage of seats occupied on individual flights. The Administrator invites public comments on the potential for reducing aircraft emissions.

#### TECHNICAL SUPPORT DOCUMENT

A discussion of the transportation control strategies proposed for the San Diego, San Joaquin Valley, Sacramento Valley, and San Francisco Bay Area Air Quality Control Regions is contained in "Development of Emission Control Strategies for Reducing Emissions in the Air Quality Control Regions of California," prepared under contract to the Environmental Protection Agency and available from the EPA Region IX office at 100 California Street, San Francisco, California 94111.

#### PUBLIC HEARINGS AND SUBMITTAL OF WRITTEN COMMENTS

Public hearings will be held on the proposed transportation control strategies contained herein. Dates and places of the public hearings are:

AUGUST 6, 1973

Fresno Convention Center,  
700 M Street,  
Exhibit Hall Wine Room,  
Fresno, California.

AUGUST 7, 1973

California State Building,  
1350 Front Street,  
Room B109, Auditorium,  
Basement,  
San Diego, California.

AUGUST 8, 1973

Federal Building  
450 Golden Gate Avenue  
Ceremonial Court Room  
19th Floor  
San Francisco, California

AUGUST 10, 1973

Resources Building  
1416 9th Street  
Auditorium  
Sacramento, California

*Times.* 9:30 a.m. to 12:00 a.m.; 1:30 p.m. to 4:30 p.m.; and 7:00 p.m. until all witness [sic] have been heard.

NOTE: Evening sessions will be held only if witnesses indicate that they can only attend evening sessions or if adequate time is not available during day sessions to hear all witnesses.

The Administrator's final promulgation of transportation controls for all affected air quality control regions in California will be profoundly influenced by the comments and testimony he receives. Persons wishing to give testimony at any of these hearings may do so by stating such intent at the hearing. Although it is not required, persons giving testimony should submit a copy of the testimony to the Region IX Office of the Environmental Protection Agency prior to the hearing date. Interested persons may also participate in this rule making by submitting written comments, preferably in triplicate, to the Regional Administrator, Environmental Protection Agency, 100 California Street, San Francisco, California

94111. All relevant comments received within 30 days of this date will be considered. Receipt of comments will be acknowledged, but substantial responses to individual comments will not be provided. Comments received and copies of the proposal will be available for public inspection at the Regional Office. Copies of the proposal will also be available for inspection at the following locations:

California Air Resources Board  
1025 "P" Street  
Sacramento, California 95814  
Fresno Air Pollution Control District  
515 South Cedar Avenue  
Fresno, California 93702  
San Diego Air Pollution Control District  
1600 Pacific Highway  
San Diego, California 92101  
San Francisco Air Pollution Control District  
939 Ellis Street  
San Francisco, California 94109  
Sacramento Air Pollution Control District  
2221 Stockton Boulevard  
Sacramento, California 95817  
Kern County Air Pollution Control District  
1700 Flower Street  
P.O. Box 997  
Bakersfield, California 93301  
Stanislaus County Air Pollution Control District  
902 Scenic Drive  
Modesto, California 95350  
San Joaquin County Air Pollution Control District  
1601 East Hazelton Street  
Stockton, California 95201  
Tulare County Air Pollution Control District  
County Civic Center  
Visalia, California 93277

The final promulgation for the San Joaquin Valley, San Francisco Bay Area, San Diego, and Sacramento Valley

Regions (as well as for the Metropolitan Los Angeles Region, which was covered under a separate proposal announcement) will take place on August 15, 1973. This notice of proposed rule making is issued under the authority of sections 110(c) and 301(a) of the Clean Air Act.

(42 U.S.C. 1857c-5)

Dated: July 6, 1973.

ROBERT W. FRI,  
*Acting Administrator.*

It is proposed to amend Part 52 of Chapter I, Title 40, of the Code of Federal Regulations as follows:

#### Subpart F—California

1. Subpart F is amended by adding §§ 52.241 through 52.255 as follows:

##### § 52.241 Gasoline limitations.

###### (a) Definition:

(1) The term "base year" means the consecutive 12-month period commencing July 1, 1972, and ending June 30, 1973.

(2) The term "distributor" means any corporation, partnership, or sole proprietorship which transports or stores or causes the transportation or storage of gasoline or diesel fuel between any refinery and any retail outlet.

(3) The term "retail outlet" means any establishment at which gasoline or diesel fuel is sold or offered for sale to the public, or introduced into any vehicle.

(b) This section is applicable in the San Diego, Sacramento Valley, San Joaquin Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions (hereinafter referred to as the Regions), to all distributors of gasoline or diesel fuel to any retail outlet in this area, and to the owners of all retail outlets in this area.

(c) Beginning July 1, 1974, the State of California shall implement regulations limiting the total gallonage of gasoline delivered to retail outlets in the Regions to the amount delivered to such outlets during the base year.

(d) Beginning May 31, 1977, the State of California shall implement regulations limiting the total gallonage of gasoline and diesel fuel delivered to retain [sic] outlets in all regions except the San Joaquin Valley to that amount which, when combusted, will not cause the ambient air quality standards for carbon monoxide and photochemical oxidants to be exceeded. The State shall by January 1, 1977, submit to the Administrator regulations for accomplishing this limitation, specifying the amount for limitation necessary.

(e) In order for the State to determine the amount of gasoline delivered during the base year and years during which control of gallonage is in effect, all distributors to which this section applies shall provide the State with a detailed accounting of the amount of gasoline delivered to each retail outlet in the Regions during the base year and years during which control is in effect. For each year during which control is in effect, the owner or operator of each retail outlet to which this section applies shall provide the State with a detailed accounting of gasoline received from each distributor, the total amount of gasoline sold during the year, and the amount of gasoline on hand at the beginning and end of the year. The State may require any other reports it may deem necessary for the implementation of this section.

(f) The State of California shall submit no later than October 1, 1973, a detailed compliance schedule showing steps it will take to establish and enforce the limitation program specified in paragraphs (c) and (e) of this section, including:

(1) The text of needed statutory proposals and needed regulations which the State will propose for adoption.

(2) A date by which the State shall adopt procedures to ensure that no more than the amount of gasoline specified in paragraph (c) of this section is delivered to

retail outlets in the Regions. Such date shall be no later than March 30, 1974.

(3) A date by which any report necessary for establishing such procedures will be furnished to the State by the distributors. Such date shall be no later than January 1, 1974.

(4) Designation of an agency responsible for implementing and monitoring this program.

(f) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, a State will be considered to have failed to comply with the requirements of this section if it fails to submit on time any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.242 Inspection and maintenance program.

##### (a) Definitions:

(1) "Inspection and maintenance program" means a program for reducing emissions from in-use vehicles through identifying vehicles which need emission-control-related maintenance and requiring that such maintenance be performed.

(2) All other terms used in this section which are defined in Part 51, Appendix N of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the San Diego, Sacramento Valley, San Joaquin Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions (hereinafter referred to as the Regions).

(c) The State of California shall establish an inspection and maintenance program applicable to all light-duty vehicles which operate on streets or highways over which it has ownership or control. No later than March 1, 1974, the State shall submit legally adopted regulations

to EPA establishing such a program. The regulations shall include:

(1) Provisions for inspection of all light-duty motor vehicles at periodic intervals no more than 1 year apart by means of a loaded (dynamometer) test.

(2) Provisions for inspection failure criteria consistent with the emission reductions claimed in the plan for the strategy. These criteria shall include failure of 50 percent of the vehicles in the first inspection cycle.

(3) Provisions to ensure that failed vehicles receive the maintenance necessary to achieve compliance with the inspection standards. These shall include sanctions against individual owners and repair facilities; retest of failed vehicles following maintenance; a certification program to ensure that repair facilities performing the required maintenance have the necessary equipment, parts, and knowledge to perform the tasks satisfactorily; and such other measures as may be necessary or appropriate.

(4) A program of enforcement to ensure that vehicles are not intentionally readjusted or modified subsequent to the inspection and/or maintenance in such a way as would cause them to no longer comply with the inspection standards. This might include spot checks of idle adjustments and/or a suitable type of physical tagging.

(5) Provisions for beginning the first inspection cycle by June 1, 1975, and completing it by June 1, 1976.

(6) Designation of an agency or agencies responsible for conducting, overseeing, and enforcing the inspection and maintenance program.

(d) After June 1, 1976, the State shall not register or allow to operate on its streets or highways any light-duty vehicle which has not complied with the applicable standards and procedures adopted pursuant to paragraph (c) of this section. This shall not apply to the initial registration of a new motor vehicle.

(e) After June 1, 1976, no owner of a light-duty vehicle shall operate or allow the operation of such vehicle which has not complied with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(f) The State of California shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce an inspection and maintenance program pursuant to paragraph (c) of this section, including:

(1) The text of needed statutory proposals and needed regulations which the State will propose for adoption.

(2) The date by which the State will recommend needed legislation to the State legislature.

(3) The date by which necessary equipment will be ordered.

(4) A signed statement from the Governor or his designee identifying the sources and amounts of funds for the program. If funds cannot legally be obligated under existing statutory authority, the text of needed legislation will be submitted.

(g) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, the State will be considered to have failed to comply with the requirements of this section if it fails to submit on time any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.243 Bus/car-pool lanes.

##### (a) Definitions:

(1) "Car pool" means a vehicle containing three or more persons.

(2) "Bus/car-pool lane" means a lane on a street or highway open only to buses (or buses and car pools), whether constructed specially for that purpose or converted from existing lanes.

(3) "Major street or highway" means any street or highway which meets the criteria given in paragraph (b) (4) (ii) and (iii) of this section.

(b) This regulation is applicable in the San Diego, San Francisco Bay Area, and San Joaquin Valley Intra-state Air Quality Control Regions, and in the Sacramento County portion of the Sacramento Valley Intrastate Air Quality Control Region.

(1) Each incorporated city within the Regions or portions thereof specified in paragraph (b) of this section shall establish bus/car-pool lanes on the major streets and highways (as defined herein) over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(2) Each county within the Regions or portions thereof specified in paragraph (b) of this section shall establish bus/car-pool lanes on the major streets and highways (as defined herein) over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(3) The State of California shall establish within the Regions or portions thereof specified in paragraph (b) of this section, bus/car-pool lanes on major streets and highways over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(4) Each of the governmental entities named in the previous three subparagraphs shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps which it will take to establish these bus/car-pool lanes and to enforce the limitations on their use, with each schedule to include the following:

(i) Each major street and highway which will have bus-car-pool lanes must be identified and a schedule given for the establishment of the lanes.

(ii) If a major street or highway has four or more traffic lanes in one direction, at least one of these lanes must be open only to buses (or buses and car pools) at all times. If only one lane is open to buses (or buses and car pools) at all times, a second lane must be open only to buses (or buses and car pools) from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

(iii) If a major street or highway has three traffic lanes in one direction, at least one of these lanes must be open only to buses (or buses and car pools) from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

(iv) In unusual situations, a street or highway, or lane segment thereof, may be exempt from these requirements if an approval of the exemption is obtained from the Administrator. The application for exemption shall not be submitted and will not be accepted after September 1, 1973. Special circumstances justifying the need for an exemption or modification (such as inappropriateness of use by buses, designation of bicycle lanes instead, or desire to allow bus/car-pool lanes to be entered briefly by other vehicles for the purpose of crossing a motor vehicle lane or making a right turn) must be given in detail with the application.

(v) Bus/car-pool lanes must be prominently indicated by overhead signs at least once every mile, and at each intersection or entry ramp. Twenty-five percent of the lane mileage for each of the governmental entities must be established and needed signs must be installed by March 1, 1974; fifty percent by June 1, 1974; seventy-five percent by September 1, 1974; and one hundred percent by December 1, 1974.

(vi) Bus/car-pool lanes must be prominently indicated by distinctive painted lines, pylons, or physical barriers.

(vii) A signed statement by the chief executive officer of each governmental entity or his designee which will identify the sources and amounts of funds for all projects.

(5) Buses shall have the right-of-way whenever changing lanes on streets and highways with bus lanes. This shall take effect as each lane is established and identified.

(6) Buses shall be permitted to make left turns whether or not the intersection is posted for "no left turn" (except when a one-way street would be entered from the wrong direction). This shall take effect January 1, 1974.

(7) None of the governmental entities named in paragraph (b) of this section shall convert existing on-street parking spaces to traffic lanes unless the effect will be to increase the number of bus/car-pool lanes on the affected street beyond the number otherwise required by paragraph (b) of this section, or unless the effect will be to create a bicycle lane in place of the parking spaces.

(c) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, a governmental entity will be considered to have failed to comply with the requirements of this section if it fails to submit on time any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.244 Management of parking supply.

##### (a) Definitions:

(1) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land for use as a facility.

(2) "Modification" means any change to a parking facility which increases the vehicle capacity of such facility.

(3) "Enlargement" means any physical change or addition to a parking facility which increases the vehicle capacity of such facility.

(4) "Commenced" means that an owner or operator has undertaken a continuous program of construction, modification, or enlargement.

(5) "Parking facility" (also called "facility") means any facility, building, structure, or lot, or portion thereof used primarily for temporary storage of motor vehicles.

(b) This regulation is applicable in the San Diego, San Francisco Bay Area, and San Joaquin Valley Air Quality Control Regions, and in the Sacramento County

portion of the Sacramento Valley Intrastate Air Quality Control Region.

(c) No person, after August 15, 1973, shall commence construction of any new parking facility or modification or enlargement of any existing parking facility until he has first received from the Administrator, or from an agency [sic] approved by the Administrator, a permit stating that construction, modification, or enlargement of such facility will not interfere with the attainment or maintenance of applicable Federal air quality standards.

(d) In order for any agency to be approved by the Administrator for purposes of issuing permits for construction of any new parking facility or any modification or enlargement of any existing parking facility, such agency shall demonstrate to the satisfaction of the Administrator that:

(1) Requirements for permit applications and issuance have been established. Such requirements shall include, but not be limited to, a condition that before a permit may be issued the following findings of fact or factually supported projections must be made:

- (i) The location of the facility.
- (ii) The total motor vehicle capacity before and after the construction, modification, or enlargement of the facility.
- (iii) The normal hours of operation of the facility and the enterprises and activities which it serves.
- (iv) The number of people using or engaging in any enterprises or activities which the proposed facility will serve.
- (v) The number of motor vehicles using the proposed facility on an average hourly basis and a peak hour basis.
- (vi) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projections shall include data concerning the availability of public transit from such areas.

(2) Criteria for issuance of permits have been established and published. Such criteria shall include but not be limited to:

(i) Full consideration of all facts contained in the application.

(ii) Provisions that no permit shall be issued if such permit will result in the increase of vehicle miles of travel within any area the air quality of which fails to meet applicable Federal air quality standards [sic].

(3) Agency procedures provide that no permit for the construction, enlargement, or modification of a facility covered by this section shall be issued without notice and opportunity for public hearing. The public hearing may be of the legislative type; the notice shall conform to the requirements of § 51.4(b) of this chapter; and the agency rules of procedure may provide that if no notice of intent to participate in the hearing is received from any member of the public (other than the applicant) prior to 7 days before the scheduled hearing date, no hearing need be held. If notice of intent to participate is required, that fact shall be noted prominently in the required notice of hearing.

§ 52.245 Limitation of public parking.

(a) The term "off-street parking facility" means any land or building or portion of a building set aside for the purpose of storing a maximum capacity of ten or more vehicles on a temporary basis.

(b) Each governmental entity or public agency owning or operating an off-street parking facility located within the San Diego, San Francisco Bay Area, or San Joaquin Valley Intrastate Air Quality Control Regions, or in the Sacramento County portion of the Sacramento Valley Intrastate Air Quality Control Region shall, by October 1, 1973, report to the Administrator the number of parking spaces in each such facility under its ownership or control. The number used solely for the storage of vehicles of persons whose residence is within  $\frac{1}{4}$  mile of the facility shall not be counted.

(c) Each such owner or operator of any off-street parking facility located within the area specified in para-

graph (b) of this chapter shall reduce the number of affected parking spaces in each such facility from the number in existence as of October 1, 1973, according to the following schedule: by January 31, 1974, a reduction of 5 percent; by July 31, 1974, a reduction of 10 percent; by December 31, 1974, a reduction of 15 percent; and by April 30, 1975, a reduction of 20 percent.

(d) Each such owner or operator of an off-street parking facility subject to the requirements of paragraph (c) of this chapter shall submit to the Administrator, no later than October 31, 1973, a detailed compliance schedule showing the steps it will take to achieve the required reduction in parking spaces. Such schedule shall provide for marking in a manner obvious to the public (painting over, roping off, etc.) those spaces which are eliminated pursuant to this section and on which parking is no longer permitted.

(e) Failure to submit a compliance schedule as required by this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. Any owner or operator of a parking facility who allows any vehicle to be parked on any parking space which has been eliminated pursuant to this section or who fails to mark clearly those spaces which have been eliminated, shall likewise be in violation and subject to enforcement.

#### § 52.246 Motorcycle limitation program.

##### (a) Definitions:

(1) "Motorcycle" means any self-propelled two- or three-wheeled motor vehicle capable of carrying one or more persons.

(2) "Two-stroke engine" means an internal combustion engine which requires two strokes of the engine's piston for a complete cycle of operation.

(3) "Registration" means the action of a State which allows a vehicle to be operated on the streets and highways in that State during a defined period of time.

(4) "Registration period" means that period of time that a vehicle is permitted to be used within the State.

(b) This section is applicable in the San Diego, San Francisco Bay Area, and San Joaquin Valley Intrastate Regions, and in the Sacramento County portion of the Sacramento Valley Intrastate Region.

(c) As of January 1, 1974, or during any registration period which commences in the calendar year 1974, the State of California shall not register in the Regions and portions thereof specified in paragraph (b) of this section more motorcycles than the total number registered in 1973.

(d) As of May 1, 1974, the State of California shall prohibit the operation of two-stroke-engine motorcycles in the Regions and portions thereof specified in paragraph (b) of this section between 6:00 a.m. and 8:00 p.m. during the months of May, June, July, August, September, and October.

(e) After January 1, 1974, no person shall operate any motorcycle on the streets and highways of the State within the Regions and portions thereof specified in paragraph (b) of this section which is not validly registered by the State of California or by another State.

(f) No later than October 1, 1973, the State shall submit a detailed compliance schedule showing the steps it will take to implement and enforce these requirements, including:

(1) The text of needed statutory proposals and needed regulations which it will propose for adoption.

(2) A date by which the State will adopt procedures (or submit evidence that they are in existence) necessary to limit the number of motorcycles registered as required above, to restrict the operation of two-stroke motorcycles as required above, and to require the registration of all motorcycles operated as required above.

(3) Proposed procedures (or evidence that they are in existence) to ensure that no motorcycle will be registered by the State in a county other than that of the owner's legal residence.

(g) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, the State will be considered to have failed to comply with the requirements of this section if it fails to submit on time any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

**§ 52.247 Oxidizing catalyst retrofit.**

(a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of the vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbons and carbon monoxide from that vehicle.

(2) All other terms used in this section which are defined in Part 51, Appendix N of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the San Diego, San Francisco Bay Area, San Joaquin Valley, and Sacramento Valley Intrastate Air Quality Control Regions.

(c) The State of California shall establish a retrofit program to ensure that on or before May 31, 1977, certain gasoline-powered light-duty motor vehicles of model years 1966 through 1974, which are subject under presently existing legal requirements to registration in the area defined in paragraph (b) of this section, are equipped with an appropriate oxidizing catalyst retrofit device. No later than March 1, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use on motor vehicles subject to this section.

(2) Designation of an agency responsible for ensuring that the provisions of subparagraph (3) of this paragraph are enforced.

(3) A provision that starting no later than May 31, 1976, the State of California shall commence retrofitting oxidizing catalysts to those light-duty motor vehicles able to operate properly on unleaded 91 RON gasoline. The installation shall be completed by May 31, 1977.

(4) A method and proposed procedures for ensuring that those installing the retrofits have the training and ability to perform the needed tasks satisfactorily and that they will have an adequate supply of retrofit components.

(d) After May 31, 1977, the State shall not register or allow to operate on public streets or highways any light-duty gasoline-powered vehicle which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After May 31, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle which does not comply with the applicable standards and procedures implementing this section.

(f) The State of California shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section, and the text of needed statutory proposals and needed regulations which it will propose for adoption. The compliance schedule shall include a date by which the State shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1975.

(g) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. A State will be considered to have failed to comply with the requirements of this regulation if it fails to submit on time the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

§ 52.248 Bus/carpool computer matching system.

(a) Definitions:

(1) "Bus/carpool matching" means assembling lists of commuters sharing similar travel needs. The number of commuters on each list identifies potential bus/car-pools.

(2) "Time-origin-destination (TOD) information" means information that identifies a commuter's work schedule, home and work location.

(3) All other terms used in this section which are defined in Part 51, Appendix N of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the San Diego, San Joaquin Valley, Sacramento Valley and San Francisco Bay Area Air Quality Control Regions (hereafter referred to as the Regions).

(c) Beginning March 1, 1974, the State of California shall establish a computer-aided bus/carpool matching system which is conveniently available to all employees in businesses having more than 10 employees within the Regions who operate light-duty vehicles on streets or highways over which it has ownership or control. No later than December 1, 1973, the State shall submit legally adopted regulations to EPA establishing such a system. The regulations shall include:

(1) A method of collecting information which will include the following as a minimum:

(i) Provisions for each affected employee receiving an application form with a cover letter describing the matching program.

(ii) Provisions on each application for applicant identification of time, origin, and destination, and the applicant's desire to drive only, ride only, or share driving.

(2) A computer method of matching information that will have provisions for locating each applicant's origin and destination within a grid system in the urban area and semi-rural region surrounding incorporated cities with a population greater than 50,000 and matching applicants with identical origin and destination grids and compatible work schedules.

(3) A method for providing continuing service such that the master list of all applicants is retained and available for use by new applicants; applications are currently available; and the master list is periodically updated to remove applicants who have moved from the area served.

(4) An agency or agencies responsible for operating, overseeing and maintaining the bus/carpool computer matching system.

(d) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act.

§ 52.249 Control of oxides of nitrogen, hydrocarbon and carbon monoxide emissions from in-use vehicles.

(a) The State of California retrofit program, authorized under section 39176 of the State of California Health and Safety Code and established by the California Air Resources Board for the purpose of controlling oxides of nitrogen, hydrocarbon, and carbon monoxide emissions from model years 1955 through 1965 light-duty motor vehicles, shall be extended to the San Joaquin Valley and Sacramento Valley Intrastate Air Quality Control Regions.

(b) Beginning January 1, 1974, the State of California shall commence the operation of this program in the San Joaquin Valley and Sacramento Valley Intrastate Air Quality Control Region.

(c) Failure to comply with any provisions of this section shall render the person or governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. With regard to compliance schedules, a State will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

**§ 52.250 Control of dry cleaning solvent vapor losses.**

(a) For the purpose of this paragraph, "dry cleaning operation" means that process by which an organic solvent is used in the commercial cleaning of garments and other fabric materials.

(b) This section is applicable in the San Diego, Sacramento Valley, San Joaquin Valley and San Francisco Bay Area Intrastate Air Quality Control Regions. The requirements of this section shall be effective commencing on January 1, 1974.

(c) In addition to the present control regulations for organic solvent users, any dry cleaning establishment that uses solvents containing any organic material listed as reactive under paragraph (k)(1), (2), and (3) of § 52.253 shall in addition reduce the emissions of the remaining organics by 95 percent by use of activated carbon adsorption or other appropriate means.

(d) If incineration is used as a control technique, 95 percent or more of the carbon in the organic compounds being incinerated must be oxidized to carbon dioxide.

(e) Dry cleaning operations using solvents considered nonreactive under paragraph (k) of § 52.253 are exempt from this section.

**§ 52.251 Control of degreasing operations.**

(a) For the purpose of this paragraph, "degreasing" means any operation using an organic solvent as a surface cleaning agent prior to fabricating, surface coating, electroplating or any other process.

(b) This section is applicable in the San Diego, Sacramento Valley, San Joaquin Valley and San Francisco Bay Area Intrastate Air Quality Control Regions. The requirements of this section shall be effective commencing on January 1, 1974.

(c) No person shall use for degreasing any organic solvent other than perchloroethylene or saturated halogenated hydrocarbons.

**§ 52.252 Organic solvent usage (Federal regulation adding to and replacing parts of Rule 66 of San Diego County).**

(a) This section is applicable in that portion of San Diego County contained within the metropolitan San Diego Intrastate Air Quality Control Region. This section is effective as of January 1, 1975.

(b) Subdivision (1) of Rule 66 of San Diego County as contained in the local air pollution control district regulations for San Diego County is amended by replacing subparagraph (5) and adding in place thereof subparagraphs (5), (6), and (7). Additional subdivisions are added and identified as (m) and (r). The identities of subdivisions (m), (n), (o), and (p) in the present San Diego regulations are changed respectively to (n), (o), (p), and (q). The amendment is as follows:

(5) The use of any material, in any article, machine, equipment or other contrivance described in subdivisions (a), (b), (c), or (e) if:

(i) The volatile content of such material consists only of water and organic solvents, and

(ii) The organic solvents comprise not more than 20 percent by volume of said bulk content, and

(iii) The volatile content is not photochemically reactive as defined in subdivision (n), and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame.

(6) The use of any material, in any article, machine, equipment or other contrivance described in subdivisions (a), (b), (c), or (e), if:

(i) The organic solvent content of such material does not exceed 20 percent by volume of said material, and

(ii) The volatile content is not photochemically reactive as defined in subdivision (n), and

(iii) More than 50 percent by volume of such volatile material is evaporated before entering a

chamber heated above ambient application temperature, and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame.

(7) The use of any material, in any article, machine, equipment or other contrivance described in subdivisions (a), (b), (c), or (e) if:

(i) The organic solvent content of such material does not exceed 5 percent by volume of said material, and

(ii) The volatile content is not photochemically reactive as defined in subdivision (n), and

(iii) The organic solvent or any material containing organic solvent does not come into contact with flame.

(m) All surface coating operations involving the application of surface coatings to metal objects shall, as of January 1, 1975, not be allowed the privilege of discharging into the atmosphere up to 40 pounds of organic material in any one day or 8 pounds in any one hour, as was previously allowed under subdivision (b) of this rule. The surface coating composition and its use must meet all other requirements of this rule.

(r) A person shall not during any one day dispose of a total of more than one and one-half gallons of any photochemically reactive solvent, as defined in subdivision (k) of this rule, or of any such photochemically reactive solvent, by any means which will permit the evaporation of such solvent into the atmosphere.

#### § 52.253 Organic solvent usage.

(a) This section is applicable in all portions of all counties contained within the San Joaquin Valley, Sacramento Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions.

(b) A person shall not discharge into the atmosphere more than 15 pounds of organic materials in any one

day or more than 3 pounds in any one hour from any article, machine, equipment or other contrivance in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured or heat-polymerized in the presence of oxygen, unless said discharge has been reduced by at least 85 percent. Those portions of any series of articles, machines, equipment or other contrivances designed for processing continuous web, strip or wire which emit organic materials in using operations described in this section shall be collectively subject to compliance with this section.

(c) A person shall not discharge to the atmosphere more than 40 pounds of organic materials in any one day or more than 8 pounds in any one hour from any article, machine, equipment or other contrivance used under conditions other than those described in paragraph (b) of this section for employing or applying any photochemically reactive solvent, as defined in paragraph (k) of this section, or material containing such photochemically reactive solvent, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air or heated drying of products for the first 12 hours after their removal from any article, machine, or other contrivance described in this section shall be included in determining compliance with this paragraph. Emissions resulting from baking, heat-curing or heat-polymerizing as described in paragraph (b) of this section shall be excluded from determination of compliance with this section. Those portions of any series of articles, machines, equipment or other contrivances designed for processing a continuous web, strip or wire which emit organic materials in using operations described in this section shall be collectively subject to compliance with this section.

(d) A person shall not, after August 31, 1974, discharge into the atmosphere more than 3,000 pounds of organic materials in any one day or more than 450 pounds in any one hour from any article, machine, equipment or other contrivance in which any nonphotochemically reactive organic solvent or any material containing

such a solvent is employed or applied, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air or heated drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in this section shall be included in determining compliance with this section. Emissions resulting from baking, heat-curing, or heat-polymerizing as described in paragraph (b) of this section shall be excluded from determination of compliance with this section. Those portions of any series of articles, machines, equipment or other contrivances designed for processing a continuous web, strip, or wire which emit organic materials in using operations described in this section shall be collectively subject to compliance with this section.

(e) Emissions of organic materials to the atmosphere from the cleanup with photochemically reactive solvent, as defined in paragraph (k) of this section, of any article, machine, equipment or other contrivance described in paragraphs (b), (c), or (d) of this section, shall be included with the other emissions of organic materials from that article, machine, equipment or other contrivance for determining compliance with this rule.

(f) Emissions of organic materials into the atmosphere required to be controlled by paragraphs (b), (c), or (d) of this section shall be reduced by:

(1) Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or

(2) Absorption, or

(3) Processing in a manner determined by the Administrator to be not less effective than subparagraph (1) or (2) of this paragraph.

(g) A person incinerating, adsorbing, or otherwise processing organic materials pursuant to this section shall provide, properly install and maintain in calibration, in good working order and in operation, devices as specified in the authority to construct or permit to oper-

ate, or as specified by the Administrator, for indicating temperatures, pressures, rates of flow or other operating conditions necessary to determine the degree and effectiveness of air pollution control.

(h) Any person using organic solvents or any materials containing organic solvents shall supply the Administrator, upon request and in the manner and form prescribed by him, written evidence of the chemical composition, physical properties and amount consumed for each organic solid used.

(i) The provisions of this section shall not apply to:

(1) The manufacture of organic solids, or the transport or storage of organic solids or materials containing organic solids.

(2) The use of equipment for which other requirements are specified by rules or which are exempt from air pollution control requirements by applicable rules affecting the storage of petroleum products, effluent oil-water separators, and the transfer of gasoline.

(3) The spraying or other employment of insecticides, pesticides or herbicides.

(4) The employment, application, evaporation or drying of saturated halogenated hydrocarbons or perchloroethylene.

(5) The use of any material in any article, machine, equipment or other contrivance described in paragraphs (b), (c), (d), or (e) of this section, if:

(i) The volatile content of such material consists only of water and organic solids, and

(ii) The organic solvents comprise not more than 20 percent by volume of said volatile content, and

(iii) The volatile content is not photochemically reactive as defined in paragraph (k) of this section, and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame.

(6) The use of any material in any article, machine, equipment or other contrivance described in paragraphs (b), (c), (d), or (e) of this section if:

- (i) The organic solvent content of such material does not exceed 20 percent by volume of said material, and
- (ii) The volatile content is not photochemically reactive as defined in paragraph (k) of this section, and
- (iii) More than 50 percent by volume of such volatile material is evaporated before entering a chamber heated above ambient application temperature, and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame.

(7) The use of any material in any article, machine, equipment or other contrivance described in paragraphs (b), (c), (d), or (e) of this section, if:

(i) The organic solvent content of such material does not exceed 5 percent by volume of said material, and

(ii) The volatile content is not photochemically reactive as defined in paragraph (k) of this section, and

(iii) The organic solvent or any material containing organic solvent does not come into contact with flame.

(j) For the purposes of this section, organic solvents include diluents and thinners and are defined as organic materials which are liquids at standard conditions and which are used as dissolvers, viscosity reducers or cleaning agents, except that such materials which exhibit a boiling point higher than 220° at 0.5 millimeter mercury absolute pressure or having an equivalent vapor pressure shall not be considered to be solvents unless exposed to temperatures exceeding 220°F.

(k) For the purpose of this section, a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:

(1) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cycloolefinic type of unsaturation: 5 percent;

(2) A combination of aromatic compounds with 8 or more carbon atoms to the molecule except ethylbenzene: 8 percent;

(3) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent.

Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

(1) For the purpose of this section, organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, metallic carbonates, and ammonium carbonate.

(m) All surface coating operations involving the application of surface coatings to metal objects shall, as of January 1, 1975, not be allowed the privilege of discharging into the atmosphere up to 40 pounds of organic material in any one day or 8 pounds in any one hour. The surface coating composition and its use must meet all other requirements of this rule.

(n) Architectural coatings and their use shall conform to the following requirements:

(1) A person shall not sell or offer for sale or use in the areas in which this regulation applies, in containers of one-quart capacity or larger, any architectural coating containing photochemically reactive solvent, as defined in paragraph (k) of this section.

(2) A person shall not employ, apply, evaporate or dry in the areas in which this regulation applies, any architectural coating purchased in containers of one-quart capacity or larger containing photochemically reactive solvent, as defined in paragraph (k) of this section.

(3) A person shall not thin or dilute any architectural coating with a photochemically reactive solvent, as defined in paragraph (k) of this section.

(4) For the purpose of this section, an architectural coating is defined as a coating used for residential or

commercial buildings and their appurtenances, or for industrial buildings.

(o) A person shall not during any one day dispose of a total of more than one and one-half gallons of any photochemically reactive solvent, as defined in paragraph (k) of this section, or of any material containing more than one and one-half gallons of any such photochemically reactive solvent by any means which will permit the evaporation of such solvent into the atmosphere.

(p) Compliance schedule: Except as provided in paragraph (q) of this section, the owner or operator of any source subject to this section shall comply with this section on or before January 31, 1974.

(1) Any owner or operator in compliance with this section on the effective date of this section shall certify such compliance to the Administrator no later than 120 days following the effective date of this paragraph.

(2) Any owner or operator who achieves compliance with this section after the effective date of this section shall certify such compliance to the Administrator within 5 days of the date compliance is achieved.

(q) Any owner or operator of a stationary source subject to paragraph (p)(1) of this section may, not later than 120 days following the effective date of this section, submit to the Administrator for approval a proposed compliance schedule that demonstrates compliance with the provisions in paragraph (p) of this section as expeditiously as practicable but no later than July 31, 1975. The compliance schedule shall provide for increments of progress toward compliance. The dates for achievement of such increments of progress shall be specified. Increments of progress shall include, but not be limited to: Submittal of final control plan to the Administrator; letting of necessary contracts for construction or process changes or issuance of orders for the purchase of component parts to accomplish emission control or process modification; initiation of onsite construction or installation of emission control equipment or process modification; completion of onsite construction or installation of emission control equipment or process modification; and final compliance.

(r) Any owner or operator who submits a compliance schedule pursuant to this paragraph shall within 5 days after the deadline for each increment of progress, certify to the Administrator whether or not the required increment of the approved compliance schedule has been met.

#### § 52.254 Gasoline transfer vapor control.

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in those portions of counties contained within Sacramento Valley and San Joaquin Valley Intrastate Air Quality Control Regions in the State of California.

(c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless such container is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than 95 percent by weight of organic compounds in said vapors displaced from the stationary container location.

(1) The vapor recovery portion of the system shall include one or more of the following:

(i) A vapor-tight vapor return line from the storage container to the delivery vessel and a device that will ensure that the vapor return line is connected before gasoline can be transferred into the container.

(ii) Refrigeration-condensation system or equivalent designed to recover no less than 95 percent by weight of the organic compounds in the displaced vapor.

(2) The vapor-laden delivery vessel shall be subject to the following conditions:

(i) The delivery vessel must be so designed and maintained as to be vapor-tight at all times.

(ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with a vapor recovery system

or the equivalent, which can recover at least 95 percent by weight of the organic compounds in the vapors displaced from the delivery vessel during refilling.

(d) The provisions of this paragraph (c) of this section shall not apply to the following:

(1) Stationary containers having a capacity less than 550 gallons used exclusively for the fueling of implements of husbandry, as such vehicles are defined in Division 16 (section 36000, et seq.) of the California Vehicle Code: *provided, however,* Said containers are equipped with submerged fill pipes.

(2) Any container having a capacity less than 2,000 gallons installed prior to promulgation of this paragraph.

(3) Transfer made to storage tanks equipped with floating roofs or their equivalent.

(e) Compliance schedule: Except as provided in paragraph (f) of this section, the owner or operator of any source subject to this section shall comply with this section on or before January 31, 1974.

(1) Any owner or operator in compliance with this section on the effective date of this regulation shall certify such compliance to the Administrator no later than 120 days following the effective date of this section.

(2) Any owner or operator who achieves compliance with this section after the effective date of this section shall certify such compliance to the Administrator within 5 days of the date compliance is achieved.

(f) Any owner or operator of a source subject to paragraph (e) of this section may, not later than 120 days following the effective date of this section, submit to the Administrator for approval a proposed compliance schedule that demonstrates compliance with the provisions specified in paragraph (e) of this section as expeditiously as practicable but no later than June 30, 1975. The compliance schedule shall provide for increments of progress toward compliance. The dates for achievement of such increments of progress shall be specified. Increments

of progress shall include, but not be limited to: submittal of final control plan to the Administrator; letting of necessary contracts for construction or process changes or issuance of orders for the purchase of component parts to accomplish emission control or process modification; initiation of onsite construction or installation of emission control equipment or process modification; completion of onsite construction or installation of emission control equipment or process modification; and final compliance.

(g) Any owner or operator who submits a compliance schedule pursuant to this paragraph shall, within 5 days after the deadline for each increment of progress, certify to the Administrator whether or not the required increment of the approved compliance schedule has been met.

#### § 52.255 Control of evaporative losses from the filling of vehicular tanks.

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in those portions of counties contained within the Sacramento Valley and San Joaquin Valley Intrastate Air Quality Control Regions in the State of California.

(c) A person shall not transfer gasoline to an automobile fuel tank from gasoline dispensing systems unless the transfer is made through a fill nozzle designed to:

(1) Effect a vapor-tight fit between the fill nozzle and filler neck of the automotive fuel tank so as to prevent discharge of hydrocarbon vapors to the atmosphere.

(2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 95 percent by weight of the organic compounds in displaced vapors are recovered.

(3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.

(d) The system referred to in paragraph (c) of this section can consist of a vapor-tight vapor return line from the fill nozzle-filler neck interface to the dispensing tank or to an adsorption, adsorption, incineration, or refrigeration-condensation system or equivalent.

(e) Components of the systems required by § 52.254 paragraph (c) can be used for compliance with paragraph (c) of this section.

(f) If demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of fill neck configuration, location, or other design features, the provisions of this paragraph shall not apply to tanks on vehicles existing at the time of promulgation of this regulation.

(g) The State of California shall divide all facilities subject to this section into two classes each of which taken as a whole emit approximately equal amounts of hydrocarbon materials. The classes shall be known as Class I and Class II.

(h) Except as provided in paragraph (j) of this section, the owner or operator of a source included in Class I shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1974.

(2) Initiation of onsite construction or installation of emission control equipment or process change must begin not later than July 31, 1974.

(3) Onsite construction or installation of emission control equipment or process modification must be completed not later than March 31, 1975.

(4) Final compliance is to be achieved not later than May 31, 1975.

(5) Any owner or operator of stationary sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(i) The owner or operator of a source included in Class II shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1975.

(2) Initiation of onsite construction or installation of emissions control equipment or process change must begin not later than July 31, 1975.

(3) Onsite construction or installation of emission control equipment or process modification must be completed not later than March 31, 1976.

(4) Final compliance is to be achieved not later than May 31, 1976.

(5) Any owner or operator of stationary sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(j) Paragraphs (h) and (i) of this section shall not apply:

(1) To a source which is presently in compliance with paragraph (c) of this section and which has certified such compliance to the Administrator by September 15, 1973. The Administrator may request whatever information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by September 15, 1973, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1975, in the case of Class I sources, and May 31, 1976, in the case of Class II sources. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.

(k) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (b) of this section fails to satisfy the requirements of § 51.15(b) and (c) of this chapter.

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[40 CFR Part 52]

DISTRICT OF COLUMBIA; APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS

Notice of Proposed Rule Making

The transportation control plan submitted by the District of Columbia for attainment of the primary National ambient air quality standards for carbon monoxide (CO) and photochemical oxidants for the District of Columbia portion of the National Capital Interstate Region was disapproved in part on June 15, 1973 (38 FR 16556). This Notice of Proposed Rulemaking sets forth regulations which in the Administrator's judgment could be implemented in addition to the approvable portions of the District of Columbia plan to attain and maintain the National standards for carbon monoxide and photochemical oxidants in the District of Columbia portion of the National Capital Interstate Region.

If revisions to the District plan are submitted and determined to be approvable prior to Federal promulgation, these proposed regulations will be withdrawn. If revisions to the District plan are submitted and determined to be approvable after Federal promulgation, then those Federal regulations will be rescinded. It is the desire of the Environmental Protection Agency that the plan to attain and maintain the carbon monoxide and photochemical oxidant standards in the District of Columbia portion of the National Capital Interstate Region be a Regional plan carried out by the District or its designated representative.

TRANSPORTATION CONTROL ALTERNATIVES

Analysis of the air quality problems in the National Capital Interstate Region, of which the District of Columbia is a part, reveals that both photochemical oxidants and carbon monoxide exhibit unacceptably high levels in the region, with the former being the pacing pollutant.

Since a substantial proportion of the photochemical oxidant problem and almost all of the carbon monoxide problem are the result of automotive vehicle emissions, measures to reduce emissions from individual vehicles and measures to reduce vehicular travel can be effective in improving air quality. Since a significant percentage of the oxidant-producing hydrocarbon emissions stem from the vehicle-related sources associated with gasoline handling operations, measures to reduce these operational losses can also provide a measurable improvement in the regional air quality.

Reductions in emissions from vehicles can be obtained through inspection and maintenance programs, and from incorporation of various retrofit devices. Reductions in Vehicle Miles Traveled (VMT) can be achieved through various pricing and taxing schemes for road use, adoption of parking restrictions, and/or limitations of available number of parking spaces, restrictions on idling or cruising of fleet vehicles, selective control of goods movement, the establishment of vehicle-free zones, establishment of a four-day week, and programs promoting the use of carpools or alternative modes of transportation and limitations on gasoline usage. It must be emphasized that, in order to be effective, each VMT control measure proposed or adopted by the District of Columbia must be reflected by identical or equivalent measures in the neighboring jurisdictions of Maryland and Virginia for their portions of the National Capital Interstate Region.

In effecting substantial improvements in air quality, improvements in and expansion of public transportation facilities are a necessary and effective complement facilitating use of this alternative to the private automobile. Clearly, public transit improvements must be implemented in concert with the appropriate level of vehicle restraints, as determined by the regional characteristics of the private automobile use demand elasticity. Such improvements as greater coverage, increased frequency of service, improved reliability, increased comfort and convenience, a reasonable cost, and adequate personal security will further encourage the use of public transit alternatives to the private automobile.

### SUMMARY

The District of Columbia plan, as amended by the July 9, 1973 and July 16, 1973 submissions, in its demonstration of the attainment of the photochemical oxidant and carbon monoxide air quality standards, utilizes the following general measures: the Federal Motor Vehicle Control Program, a Motor Vehicle Inspection Program for all gasoline powered vehicles, improvements in public transportation, increased "terminal" (or parking) charges, a bus/car pool locator program, selective control of goods movement, restrictions on aircraft ground operations, and increased control of stationary source emissions.

According to the District of Columbia plan, which utilizes data compiled by the Metropolitan Washington Council of Governments for the entire National Capital Interstate Region, peak period hydrocarbon emissions were 63.3 tons for the Region as a whole and peak period carbon monoxide emissions were 1133.5 tons in 1972. In order to demonstrate attainment of standards, the Council of Government calculations indicate that hydrocarbon emissions must be reduced by 67 percent of the 1972 emissions in the National Capital Interstate Region to a level of 20.9 tons/peak period, and that carbon monoxide emissions must be reduced by 55.6 percent of the 1972 emissions in the Region to a level of 501 tons/peak period.

Including projected increases in vehicle miles of travel the Federal Motor Vehicle Control Program will reduce hydrocarbon peak period emissions by 47 percent to 33.6 tons and will reduce carbon monoxide emissions by 49 percent to 576 tons/peak period by 1977. These estimates are adjusted to reflect the 1975 interim motor vehicle emission standards as announced on April 11, 1973.

Since the 21-day period for public comment on the additional submissions has not been completed, it is impossible for the Administrator to make a final decision on approval or disapproval of the strategies included in the District of Columbia plan at this time. This decision

must take into consideration all comments received during this time. However, preliminary review by EPA indicates that certain strategies are likely to be approvable. Accordingly, the Agency is proposing only those items which, when added to the approvable measures, are necessary to attain the National Ambient Air Quality Standards.

If an apparently approvable strategy is determined not to be approvable additional measures will be proposed.

The information contained in the additional submissions by the District appears to remedy many of the deficiencies on which the Administrator's June 15 decision was based.

The following is a summary of the actions EPA is proposing to take with respect to the District of Columbia Plan:

*Federal Motor Vehicle Control Program*—Reductions appear to be approvable, based on projected vehicle populations and emission factors.

*Motor Vehicle Inspection Program*—Appears to be approvable based upon proposed regulation and supporting data.

*Improvements in Public Transit*—(a) District participation in the area wide addition of 750 buses to current fleet—appears to be approvable, contingent upon clarification of certain administrative details.

(b) Exclusive Bus Lanes—appears to be approvable.

(c) System Improvements (i.e., shelters, fringe parking, improved scheduling)—appears to be approvable.

*Increased Terminal Charges*—(a) Elimination of free employee parking for District of Columbia Government employees and private employees in certain areas—appears to be approvable.

(b) Elimination of on-street long-term parking in certain areas—appears to be approvable.

(c) \$2.00 parking surcharge (or an equivalent measure)—appears to be approvable.

*Bus/Carpool Locator Program*—Appears to be approvable.

*Selective control of goods movement* (heavy duty gasoline powered vehicle use ban 6:00-9:30 a.m. and 4:00-6:30 p.m.)—Appears to be approvable.

*Restrictions on aircraft ground operations*—Partial reductions are allowable; appears to be partially approvable.

*Increased Control of Stationary Source Emissions*—Not approvable at this time due to lack of adopted regulations.

Since full reductions claimed for aircraft emissions do not appear to be allowable, and the controls over stationary sources cannot be approved at this time, EPA is proposing the following measures:

Retrofit by 1975 of all pre-1968 vehicles with a vacuum spark advance disconnect kit.

Retrofit of light-duty 1971-1975 fleet vehicles (including federal government vehicles) and taxicabs and certain 1975 model light-duty vehicles with an oxidizing catalyst retrofit—beginning in mid-1976 to be completed by mid-1977.

Further controls over emissions of hydrocarbons due to gasoline handling; both from delivery truck to underground tank, and from the pump to the vehicle. Implementation begins in 1974 and is fully completed by 1977.

Further controls over drycleaning operations beginning in 1974.

The District plan also indicated that the elimination of free Federal employee parking was essential to the success of their transportation control strategy. It further encouraged the Federal Government to take direct action to implement this portion of the strategy.

Accordingly, EPA is also proposing to institute commercial type parking rates or reduce by 12 percent the available spaces at any federal facility which is in a high density employment area and which is well serviced by public transit. The commercial rates would go into effect January 1, 1975, and the reduction would be phased, beginning November 30, 1974 and ending on May 31, 1975.

Finally, since the \$2.00 surcharge proposed by the District is integral to the success of this plan, EPA is proposing contingency strategies to be implemented if appropriate steps are not taken to implement the surcharge. These contingency measures are:

A ban on the construction, modification or enlargement of any parking facility without having first obtained a permit from the Administrator.

A phased 15 percent reduction in the number of off-street parking spaces.

The Administrator invites comments on these and any other measures which may be used to achieve the national ambient air quality standards for photochemical oxidants and carbon monoxide.

#### TWO-YEAR EXTENSION TO ACHIEVE STANDARDS

The Administrator proposes to give a two-year extension for the attainment of the standard in the District of Columbia. To attain the standards in 1975 would require stringent restraints on vehicle miles traveled which could not be considered to be "reasonably available" within the meaning of section 110(e) of the Clean Air Act, or the implementation of a widespread catalytic retrofit program which could not be implemented due to technological problems before 1977. Although some measures have not been proposed here which have appeared in some other proposals, such as gasoline limitations and a selective vehicle exclusion program involving colored tags, the reduction in vehicle miles traveled expected from measures contained herein appears to be substantial and adequate to fulfill the requirement that reasonably available alternative measures be employed before an extension is given for any strategy. The plan proposed herein, along with the apparently approvable measures submitted by the District of Columbia, apply the reasonably available alternative means of control at the earliest possible dates. Comment is invited on any measures which have not been considered and applied and which can be considered to be reasonably available.

#### SUMMARY OF EFFECTS

The following table is a summary of the effect of the proposed strategies on the total reductions required.

COMPILED OF CONTROL STRATEGY EFFECTS FOR THE NATIONAL CAPITAL INTERSTATE REGION ON MAY 31, 1977

	Carbon Monoxide	Hydrocarbons		
	Tons per Peak Period	Percent of Total Reduction Required	Tons per Peak Period	Percent of Total Reduction Required
Stationary Source Emissions Without Control Strategy	78		14.8	
Expected Reductions From:				
(a) Dry Cleaning Vapor Recovery	0	0	1.1	8.7
(b) Gasoline Handling Vapor Recovery	0	0	5.0	39.4
(c) Other Stationary Source Rule Strengthening	0	0	0	
Stationary Source Emissions Remaining	78		8.2	
Mobile Emissions from Highway Light and Heavy Duty Vehicles without Control Strategy	498		19.8	
Expected Reductions From:				
(a) Inspection and Maintenance	26	34.6	1.5	11.8
(b) VSAD Retrofit, pre-'68 cars	3	4.0	0.4	3.2
(c) Catalytic Retrofit of Fleet LDV's	5	6.7	0.2	1.6
(d) Mass Transit Improvements	21	28	2.7	21.2
(e) HDV Peak Hour Delivery Ban	27	36	1.0	7.9
(f) Aircraft Ground Operations	12	0.8	6.4	
Mobile Emissions Remaining	416		12.7	
Total Emissions without Strategy (FMVCP Included)	576		33.6	
Total Reductions	82	100.0	12.7	100.2
Total Emissions Remaining	494		20.9	

#### PROPOSED CONTROLS ON STATIONARY SOURCES

The major stationary sources of hydrocarbon emissions which have been identified in the District of Columbia's plan, are the gas handling losses which occur in the distribution system for gasoline fuel, and the emission losses from dry cleaning establishments. Since present regulations are inadequate to effect any substantial control on the resultant emissions, the District of Columbia has proposed regulations and compliance schedules which would reduce gasoline handling losses by 90 percent and dry cleaning losses by 85 percent.

The regulation proposed by the District of Columbia for control of hydrocarbon emissions through vapor recovery during service station and automobile tank refueling operations requires the installation by May 31, 1975 of a vapor collection and disposal system which is 90 percent effective, on all loading facilities for tank trucks or trailers, railroad tank cars, locomotives, aircraft, or stationary storage tanks with a capacity of more than 250 gallons; and for boat or motor vehicle fuel tank filling equipment applied to facilities with a capacity greater than five gallons. The proposed regulation further requires provision for a means to prevent liquid organic compound drainage from the loading device when it is removed from the hatch. It is estimated that installation of 90 percent effective vapor recovery devices on all installations throughout the Region will result in a total reduction of hydrocarbon emissions of 5.0 tons/peak period by 1977.

The regulation proposed by the District of Columbia for elimination of dry cleaning losses require that all dry cleaning operations emitting more than three pounds per hour or 15 pounds per day of photochemically reactive hydrocarbons shall install, prior to January 1, 1975, control devices to reduce such emissions by at least 85 percent of the uncontrolled emissions. It is estimated that the effect of the proposed 85 percent control of dry cleaning losses throughout the National Capital Interstate Region will result in a total reduction in hydrocarbon emissions of 1.1 tons per peak period.

The foregoing regulations as proposed by the District of Columbia appear to be adequate to achieve the anticipated reduction in hydrocarbon emissions. However, the Administrator cannot approve these proposed regulations at this time, since 40 CFR Part 51 requires that all regulations dealing with the control of emissions from stationary sources be adopted at the time of submittal of the plan. EPA is therefore proposing to promulgate similar regulations which will be rescinded upon submission of equivalent regulations as adopted by the District of Columbia.

The Environmental Protection Agency has also examined the District of Columbia's regulations governing emissions of organic solvents resulting from degreasing operations and from evaporation from surface and architectural coatings. For degreasing operations, there are no specific requirements that non-reactive material be used such as perchlorethylene or saturated halogenated hydrocarbons. Comments are solicited on whether degreasing operations in the National Capital Interstate Region are a significant source of reactive hydrocarbon emissions for which a specific regulation should be promulgated.

Emissions of other solvents in the National Capital Interstate Region were also investigated. It has been determined that technology does exist to control more efficiently the emissions of a number of the smaller heating (15 to 200 lb. per day category) involving organic solvents.

Comments are solicited as to whether it is feasible or practicable to require additional controls on these sources, many of which are presumably located on premises of small sized firms. If these comments indicate that further controls are needed, then the Administrator proposes to promulgate regulations equivalent to those currently adopted by the County of Los Angeles Air Pollution Control District as Rule 66. L.A. Rule 66 contains minor exceptions involving evaporative emissions from gallon (or smaller) sized containers of architectural coating compounds, and from the allowable disposal limits of waste solvent materials. There are no data presently available to the Administrator on the atmospheric burden that may be created by such evaporative emissions though they are presently believed to be very small.

#### PROPOSED CONTROLS ON MOBILE SOURCES (NON-AIRCRAFT)

The District of Columbia, in its submissions proposes a loaded emissions inspection program in conjunction with its existing annual safety inspection program. The

July 9, 1973 submission proposes a 13% reduction in hydrocarbon emissions from private and commercial vehicles. Therefore, this part of the District of Columbia plan appears to be approvable. Anticipated emissions reductions from the inspection/maintenance program as proposed throughout the National Capital Interstate Region, are 1.5 tons per peak period for hydrocarbons and 26 tons per peak period for carbon monoxide.

In order to comply with the requirements of the Clean Air Act that primary standards be achieved as expeditiously as practicable, the Administrator proposes to promulgate a regulations [sic] requiring that on or before January 1, 1975, all pre-1968 light duty vehicles be retrofitted with a vacuum spark advance disconnect device which will reduce hydrocarbon emissions from such vehicles by 25 percent and carbon monoxide emissions by 9 percent. If implemented throughout the National Capital Interstate region, installation of these devices will result in a total reduction of hydrocarbon emissions of 0.4 tons per peak period and a reduction of 3.0 tons per peak period of carbon monoxide emissions.

In order to attain the primary air quality standard by May 31, 1977 additional measures are required beyond those proposed by the District of Columbia. Since catalytic retrofit devices for light duty vehicles are expected to be readily available by 1977, it is proposed to require installation of these devices on selected segments of the light duty vehicle population. These segments include all 1971-1975 LDV fleet vehicles (e.g., taxis, GSA vehicles, rental cars, fleet delivery vehicles), capable of operating on 91 RON gasoline. The regulation proposed by the Administrator will require that the above motor vehicles be equipped with catalytic retrofit devices by May 31, 1977, effecting a 50% hydrocarbon emission reduction for each vehicle. Exemptions will be allowed for all 1975 vehicles originally equipped with the oxidizing catalytic converter or those vehicles which are certified to meet the original statutory federal emission standards for 1975. Based on information currently available to him, the Administrator estimates that:

Fleet vehicles account for 6 percent of total mobile source emissions. Under the assumptions that one-third of the fleet vehicles will be older than two years (pre-1976), and catalytic retrofits can reduce automotive emission by 50 percent, it is apparent that this measure, when applied on a Region-wide basis, will result in a hydrocarbon emission reduction of 0.2 tons/peak period.

In the event that the measures proposed herein prove to be inadequate, the Administrator is required by law to apply additional reasonably available alternatives, such as catalytic retrofit of other segments of 1968-1975 light duty vehicle population. Candidate segments include all light duty trucks, or passenger vehicles of specified model years. The public is urged to comment on these or any other type of control measure that may help to achieve the National Ambient Air Quality Standards.

#### PROPOSED REDUCTION IN VMT

According to computer printouts provided by the Metropolitan Washington Council of Governments, the District of Columbia's transportation package (including participation in the area wide expansion of transit by 750 buses, exclusive bus/carpool lanes, a carpool locator service, and extensive parking restrictions) will result in a 12 percent reduction in 6-9 a.m. VMT and a corresponding reduction in total trips during those hours.

The total commitment of the District of Columbia to the transportation package is demonstrated by submission of proposed regulations for the following supportive measures:

- 1) Participation in the area wide improved transit system, including the addition of 750 buses to the current area fleet and the establishment of exclusive bus lanes, bus shelters, and fringe parking facilities.
- 2) Increased terminal cost, including the elimination of free parking and the establishment of a \$2.00 parking surcharge for long-term commuter parking in all areas served adequately by mass transit, and strict enforcement of reciprocal parking agreements.

3) Establishment of a computerized carpool locator service.

This portion of the plan is central to the District of Columbia's plan for reduction of HC and CO emissions. Therefore, to avoid confusion and expedite comments, a discussion of the elements that make up this portion of the plan shall be included.

a. *Elimination of Free Parking*—The District of Columbia proposes to eliminate free parking for the District of Columbia government employees, and for employees of private businesses located in the District of Columbia. A portion of this shall be achieved by the elimination of street commuter parking (in major arterials) and by requiring all District of Columbia government employees and all privately operated lots which are providing free employee parking to establish charges for this parking.

These measures will be imposed in high density employment areas which are adequately served by mass transit. These areas will be more specifically described by the District within the next 10 months, upon completion of studies of the matter.

Additionally, the District proposes to enter into a reciprocal enforcement program for parking violations. Thus, enforcement of the existing parking regulations will be facilitated.

On the basis of the information submitted by the District of Columbia in its plan, the Administrator feels that this portion of the District of Columbia's plan is approvable.

As pointed out in the District of Columbia's plan, (reduction) [sic] of emissions due to work trips into, out of and within the District by Federal Government employees is integral to achieving air quality goals. Therefore, EPA feels it has the responsibility to aid the District in the control of these emissions. As a result, EPA will follow the District's suggestion and propose a federal regulation which would effectively reduce emissions as a result of commuter trips by federal employees. This will be done by requiring Federal Facilities in high density areas served by mass transit either to eliminate free parking

by establishing commercial type rates or to reduce the available parking spaces in these facilities by 12 percent. The Administrator feels that the result of this proposal will be to induce Federal employees to utilize alternate modes of transportation, such as buses and carpools and thereby reduce the VMT in the area. It should be noted that this proposal should result in a reduction of the VMT for employees from all three jurisdictions in the National Capital area.

It is the Administrator's opinion that, at a minimum the central business district (Massachusetts Avenue, 1st Street NW.; Constitution Avenue and 23rd Street, NW.) as well as the Southwest Mall-Waterside Mall area in Southwest, the Capitol Hill area, along with other areas would, in all likelihood, need to be included in any definition of high density employment area which is serviced by mass transit for this strategy to be effective.

b. *\$2.00 Surcharge*. The District of Columbia plan proposes the imposition of a \$2.00 per day surcharge (or an equivalent measure) on all long-term commercial parking facilities in employment areas which are adequately served by mass transit. Identification of the areas where the surcharge is to be imposed should be made by the District of Columbia within the next 10 months, upon completion of studies of the matter.

This proposal is to be implemented and enforced by the parking agency to be established by the District. The Administrator feels that if implemented according to the schedule provided in the plan, this proposal is approvable.

The effectiveness of mass transit systems can be greatly enhanced by imposing disincentives to the use of the private automobile. It is felt the District's proposals [sic] for the surcharge is integral to the success of the plan.

The Administrator wants to make it clear that if for any reason this strategy is not implemented according to schedule, he will institute equivalent measures. In order to avoid any delay in implementation of such equivalent measures and to invite timely public comment, the Administrator is proposing contingency measures in the

plan which will become effective if it becomes apparent that the surcharge will not be implemented. Specifically, a phased 15 percent reduction in existing off-street parking spaces would be imposed, as well as ban [sic] on the construction, modification or enlargement of any parking facility without first obtaining a permit from the Administrator. Public comments are solicited on these contingency proposals.

c. *Mass Transit Improvements.* The development of an effective mass transit system is essential to the development of an effective transportation control strategy. If the strategy is to be successful, a sufficient number of buses with convenient service and adequate schedules must be provided.

The District of Columbia plan proposes that the District shall take all possible measures to assure that the area wide transit system's current fleet be increased by 750 buses and that its service and convenience for commuters be improved. Included in this proposal are provisions for installing bus shelters, providing additional public information and improved scheduling. In addition, the District plans to institute a number of exclusive bus lanes, and contra-flow lanes on major highway corridors into the downtown area. All of these measures are meant to provide the increased mass transit service which will be necessary if air quality standards are to be achieved.

Based on the information contained in the three documents submitted by the District, the Administrator feels that the proposals for increased mass transit are approvable, on the condition that certain administrative details are provided to him by the District. Specifically, the arrangements or agreements which will trigger the expansion of the fleet should be clarified, since it is necessary for EPA to determine what actions are necessary to bring about any additional purchases of buses. Also a clarification on [sic] the schedule showing the projected incremental increases in fleet size should be provided.

d. *Bus/Car Pool Locator System.* The District of Columbia plan recognizes the need for more efficient automobile usage. Thus, the plan proposes a voluntary bus/car pool locator matching service. This system will at-

tempt to assemble lists of commuters with similar work schedules and home, work locations, and will be phased in starting with pilot projects during 1973. Full operation of the system is scheduled for April 1974. The Administrator feels that this measure is approvable and encourages residents of the National Capital area to take advantage of this service.

Along with the benefits accruing to this system in terms of a potential decrease of vehicle miles traveled, this system also will mitigate the impact of disincentives to private auto use (i.e., the surcharge and elimination of free employee parking).

e. *Heavy Duty Vehicle Restraints.* In addition to the transportation measures described above, the District of Columbia plan proposes to reduce emissions from heavy duty gasoline powered vehicles. Since a substantial portion of the peak hour emissions of both hydrocarbons 6 percent and carbon monoxide 10 percent are produced by heavy duty trucks, the District of Columbia proposes a regulation which would ban peak hour (6-9:30 a.m., 4-6:30 p.m.) deliveries by gasoline-powered heavy duty trucks. Proposed compliance dates are January 1974 for the morning hours and January 1975 for the two peak periods. Assuming that the ban will result in a 50 percent reduction in heavy duty truck emissions (due to the exception of essential services and through traffic), calculations indicate a peak-hour reduction in total hydrocarbon emissions by 1.0 ton/peak period. The Administrator commends the District of Columbia for proposing this effective measure and feels that this measure is approvable.

#### AIRCRAFT EMISSION REDUCTION

Aircraft emissions, as they affect ambient air quality, occur during approach, landing, taxi, idle, takeoff, and climbout. Heaviest emissions occur during taxi and idle when aircraft engines are operated at greatly reduced power.

The District of Columbia Transportation Control Plan asserts that control of these emissions through modified

ground operations at Dulles and Washington National Airports can result in a significant hydrocarbon, and carbon monoxide emission reduction in the National Capital Region. The District of Columbia contends that a 50 percent reduction in hydrocarbon and carbon monoxide emissions can be achieved though the implementation of such ground controls at the two northern Virginia airports. Such a reduction would represent a 1.7 ton reduction in the area's hydrocarbon emissions and 28 ton reduction in the area's carbon monoxide emissions. The District of Columbia assumes the required measures will be fully implemented by EPA and FAA during the next four years and takes full credit for the potential emissions reductions which they believe could result from these measures.

The assumed reduction in hydrocarbon emissions is necessary for the plan to demonstrate achievement of the oxidant standards; the claimed carbon monoxide reductions are not needed for attainment of the standard.

EPA has published an Advance Notice of Proposed Rulemaking for aircraft ground controls but has not yet proposed regulations for such controls. The Agency, however, is currently funding a demonstration project with FAA to determine if safety hazards would accompany modified ground operations. If the demonstration is successful, EPA will propose and promulgate regulations for the implementation of ground operations deemed free of safety hazards.

The Agency currently believes that certain ground and taxi operations included in the demonstration can be conservatively assumed to be safe and acceptable. EPA calculations indicate that the application of these measures could result in a 24 percent reduction in hydrocarbons at National Airport and a 30 percent reduction in hydrocarbons at Dulles Airport versus 50 percent reduction proposed by the District of Columbia. No reductions are assumed for Andrews Air Force Base, which is responsible for 15 percent of the emissions inventory. In light of EPA's intention to work jointly with FAA to promulgate and implement ground operations deemed safe and

acceptable prior to 1977, the Agency believes it is reasonable to allow the District of Columbia to accept credit for emission reductions which will result from controlling the ground operations conservatively felt at this time to be safe and acceptable. The percent emissions reductions indicated above which would result from these measures would provide approximately a 0.8 tons reduction in hydrocarbons for the National Capital Region. Accordingly, the Agency will accept 0.8 tons of the claimed 1.7 tons hydrocarbon reduction as being an approvable portion of the plan based on the expected implementation of ground operation regulations.

#### ECONOMIC AND SOCIAL IMPACT

The social and economic consequences of the measures included in the District of Columbia plan or proposed herein are considered reasonable. For example, the inspection and maintenance procedures will require expenses of approximately \$10 annually for the average vehicle inspected. The implementation of the VSAD retrofit program of pre-1968 vehicles will require that individual motorists pay approximately \$20 installation costs. Though the price to the fleet vehicle owner for the catalytic retrofit is \$135 per vehicle, this cost could gradually be reclaimed through slightly higher service or use fees for the fleet vehicles controlled. In addition, such expenditure can be deducted from income tax as a business expense, and therefore part of the cost will be absorbed by the government. Compensation for the expenditures associated with the modifications required by the gasoline handling regulations could similarly be gained through slight increase in the fees for station services or fuel prices. This also could be deducted as a business expense from the income tax. Distributed costs of the various mass transportation improvement measures, as well as the incentives for the use of express buses and carpools and disincentives on the use of automobiles by individual motorist-commuters, are also considered reasonable.

The measures providing transportation improvements are expected to benefit the public from the standpoint of improved traffic flow for commuters, general urban mobility, and energy consumption. The resulting VMT reductions may also have some impact on the sprawling development patterns fostered by widespread automobile use which are unduly wasteful of energy, land and other resources and have contributed to the decay of urban centers.

#### PUBLIC COMMENTS SOLICITED

Although the Administrator has concluded that the proposed plan is the best approach available to him at the present time for achieving compliance with the requirements of the Act, further analysis may demonstrate that more appropriate options are available. He therefore desires to obtain the comments and suggestions of the public on the problems of achieving the ambient air quality standards in the District of Columbia portion of the National Capital Interstate Air Quality Control Region. Comments are particularly invited pertaining to measures that may be taken by Federal, State, or local authorities to support or supplement the proposed air pollution control strategy, to implement these measures, and to compare social and economic effects of alternative pollution control measures.

Public hearing will be held in the Department of Commerce Interior [sic] departmental Auditorium, 14th Street between E and Constitution Avenues, N.W., Washington, D.C. on September 5, 1973, beginning at 9:00 a.m. Notice of the hearing on these regulations (including designation of locations for inspection and distribution of EPA proposals) is being published in the District of Columbia.

The Administrator's final promulgation of transportation controls for the District of Columbia will be significantly influenced by the comments and testimony he receives, as well as any additional approval strategies submitted by the District of Columbia as part of the District of Columbia plan before or at the hearing. These

influences, and the additional analysis of alternative strategies that can be made in the time between this proposal and final promulgation, may lead the Administrator to adopt final regulations that differ in important ways from this proposal.

#### SUBMITTAL OF WRITTEN COMMENTS

Interested persons may participate in this rule making by submitting comments, preferably in triplicate, to EPA, Attention: Mobile Sources Enforcement Division, 401 M Street SW., Washington, D.C. 20460. All relevant comments received on or before September 4, 1973 will be considered. Receipt of comments will be acknowledged, but substantive responses to individual comments will not be provided. Comments received will be available for public inspection during normal business hours at EPA, Office of Public Affairs, 401 M Street SW., Washington, D.C. 20460. This notice of proposed rule making is issued under the authority of section 110(c) and 301(a) of the Clean Air Act (42 U.S.C. 1857 et seq.).

#### EPA STUDIES AND GUIDELINES

Further information on transportation control, land use, and motor vehicle emissions may be obtained from one or more of the following documents which the Environmental Protection Agency has published:

a. "Prediction of the Effects of Transportation Controls on Air Quality in Major Metropolitan Areas" and "Evaluating Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas," November 1972. Both of these documents are generally known as the "Six Cities Study".

b. "Transportation Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas", December 1972. This document is a summary of a study of 14 cities conducted with the view of recommending specific transportation control strategies. (Sep-

arate reports for each of the 14 cities are also available.)

NOTE: The documents listed in a and b above are available from the Air Pollution Technical Information Center, EPA, Research Triangle Park, North Carolina 27711.

c. "Control Strategies for In-Use Vehicles", November 1972. This report is available from EPA, Mobile Source Pollution Control Programs, 401 M Street, SW., Washington, D.C. 20460.

d. "Transportation Control Measures", FEDERAL REGISTER (38 FR 15194) June 8, 1973.

e. "Aircraft and Aircraft Engines", FEDERAL REGISTER (37 FR 26488) December 12, 1972.

f. "Aircraft Emissions: Impact on Air Quality and Feasibility of Control". This report presents the available information on the present and predicted nature and extent of air pollution related to aircraft operations in the United States. In addition, it presents an investigation of the present and future technological feasibility of controlling such emissions.

g. "An Air Pollution Impact Methodology for Airports—Phase I", APTD-1470, January, 1973.

(42 U.S.C. 1857 et seq.)

Dated: July 24, 1973.

ROBERT W. FRI,  
*Acting Administrator.*

It is proposed to amend Part 52 of Chapter I of Title 40 of the Code of Federal Regulations by adding the following:

#### § 52.486 Reduction of Employee Parking.

##### (a) Definitions:

(1) Government Entity—means a federal, department, agency, bureau, board, office, commission, district, or unit

of any other type (excluding foreign embassies) which employs personnel paid wholly with public funds.

(2) Commercial Parking Rate—means the average rate charged by commercial parking facilities (excluding on-street parking meters) on a monthly basis within a 1 mile radius of a facility or installation covered by this section.

(3) Served by Public Transit—means that such transit is available during working hours within a reasonable walking distance of the employee's place of employment, even though such transit may not serve the area of the employee's residence.

(b) This section shall be applicable in the District of Columbia portion of the National Capital Interstate Air Quality Control Region.

(c) (1) All facilities or installations owned, operated or leased by federal government which control, operate or lease a parking facility containing 25 or more spaces, shall by January 1, 1974, report to the Administrator the number of parking spaces in each such facility as of October 15, 1973. This number shall not include residential (including barracks) parking spaces contained in or on the facility or installation.

(2) The chief administrative officer of all facilities or installations subject to paragraph (c) (1) of this section, shall by April 1, 1974, submit to the Administrator a detailed report specifying the level of public transit service to the facility, and also the parking space utilization at the facilities or installations under his or her control at that time. This report shall include but is not limited to:

(i) All public transit lines which have stops within one-half mile of any such installation or facility.

(ii) The practicality of the operation of shuttle service from presently well serviced location [sic] such as (Federal Triangle, Southwest Mall, Georgetown, Capitol Hill, etc.) to the facility or installation during morning and afternoon peak hours.

(ii) A summary of the existing parking situation at the facility including:

(a) average vehicle occupancy calculated from a visual survey of vehicles entering and leaving the facility over a full week's time.

(b) the percentage of vehicles with one, two, three and four occupants.

(c) the total number of vehicles using the facility daily.

Should the report state that the facility or installation is not presently served by public transit, this report shall be reexamined, updated, and submitted annually not later than April 1 of each successive year.

(d) Each governmental entity subject to paragraph (c)(1) of this section which in the opinion of the Administrator is served by public transit shall comply with either paragraph (d)(1) or (2) of this section. The governmental entity shall either:

(1) Adopt a plan whereby a charge equivalent to commercial parking rates will be imposed for parking at any such parking facility owned, operated or leased by the governmental entity. In no case shall the charge be less than \$20.00 per space per month. Any funds collected by any governmental entity under this subparagraph may be used for any legitimate governmental purpose, *Provided, however,* That no such funds shall be used to subsidize directly or indirectly employee parking; or

(2) Adopt a plan to reduce the number of parking spaces in each facility from the number in existence on October 15, 1973, according to the following schedule:

- (i) by November 30, 1974, a reduction of 4 percent
- (ii) by February 28, 1975, a reduction of 8 percent.
- (iii) by May 31, 1975, a reduction of 12 percent

(e) (1) Each entity of the Federal government subject to paragraph (c) of this section shall submit to the Administrator no later than June 30, 1974, a detailed compliance schedule showing steps it will take to achieve either the required reduction of spaces, or the initiation of commercial parking rates. In the case of a reduction of spaces, the schedule shall include provisions for marking those spaces to be eliminated in a manner obvious

to members of the public (painting over, roping off, etc.). In the case of the initiation of commercial parking rates, the schedule shall include:

(i) A date for the initial imposition of the change. Such date shall be no later than January 31, 1975,

(ii) The amount to be charged per space per month,

(iii) Any exceptions to the charge (e.g., handicapped personnel, certain high level officials of the governmental entity), including documentation of the need and rationale for such exceptions,

(iv) Provisions for annual reevaluation of the amount charged per space per month based upon any changes in commercial parking rates.

(f) Failure to submit any report or compliance schedule as required by this section shall render the person so failing to comply in violation of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. Any governmental entity which either allows vehicles to be parked in excess of the number allowable, or which fails to collect commercial parking charges, shall likewise be in violation and subject to enforcement.

#### § 52.487 Limitation of Off-Street Parking.

(a) This section shall apply only in the event that the Administrator finds that the District of Columbia fails to take one or more of the following steps to implement the \$2.00 surcharge (for an equivalent measure):

(1) Complete study identifying locations where surcharge or equivalent measure shall apply and submit to the Administrator by May 30, 1974.

(2) Submit to the Administrator legally adopted regulations of the District of Columbia or other governmental entities to collect the surcharge or impose the equivalent measure by June 30, 1974.

(3) Institute the collection of the surcharge or impose the equivalent measure in those areas identified in the study by April 1, 1975.

(b) In the event the District of Columbia chooses to adopt any "equivalent measure" to this surcharge, the District of Columbia must submit to the Administrator by December 31, 1973, information demonstrating that such measure will in fact achieve the required result. Failure to demonstrate this fact adequately will cause the Administrator to determine that the District of Columbia is failing to implement the surcharge.

(c) In the event that the Administrator determines that the District of Columbia is failing to implement the \$2.00 surcharge (or an equivalent measure) he shall make this determination public in the FEDERAL REGISTER, and this section shall then be immediately effective.

(d) Definition:

(1) The term "off-street parking facility" means any land or building or portion of a building set aside for the purpose of storing a maximum capacity of 10 or more vehicles on a temporary basis.

(e) Each governmental entity, public agency, private corporation, partnership or sole proprietor owning or operating an off-street parking facility located within the District of Columbia portion of the National Capital Interstate Air Quality Control Region shall, within 30 days of the effective date of this regulation, report to the Administrator the number of parking spaces in each such facility under its ownership or control of the effective date of this regulation. The number used solely for the storage of vehicles of persons who reside within  $\frac{1}{4}$  mile of the facility shall not be counted.

(f) Each such owner or operator of any off-street parking facility located within the area specified in paragraph (c) of this section shall reduce the number of affected parking spaces in each such facility from the number in existence as of the date this regulation becomes effective according to the following schedule:

(i) Within 90 days of the effective date—a 5 percent reduction;

(ii) Within 120 days of the effective date—a 10 percent reduction;

(iii) Within 180 days of the effective date—a 15 percent reduction.

(g) Each such owner or operator of an off-street parking facility subject to the requirements of this section shall submit to the Administrator, no later than 60 days after the effective date of this section, a detailed compliance schedule showing the steps it will take to achieve the required reduction in parking spaces. Such schedule shall provide for the marking in some manner obvious to the public (such as painting over, roping off, or the like) of the eliminated spaces on which parking is not permitted pursuant to this section.

(h) Failure to submit a compliance schedule as required by this section shall render the person or governmental entity so failing in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. Any owner or operator of an off-street parking facility who allows any vehicle to be parked on any parking space which has been eliminated pursuant to this section, or who fails to mark clearly those spaces which have been eliminated, shall likewise be in violation and subject to enforcement.

**§ 52.488 Vacuum Spark Advance Disconnect.**

(a) For purposes of this section, "vacuum spark advance disconnect" means a device or system installed on the vehicle which prevents the ignition vacuum advance from operating either when the vehicle's transmission is in the lower gears or when the vehicle is traveling below a predetermined speed.

(b) This section is applicable in the District of Columbia portion of the National Capital Interstate Air Quality Control Region.

(c) On or before January 1, 1975, all gasoline-powered light duty vehicles of model year prior to 1968 and subject under presently existing legal requirements to registration in the area described in paragraph (b) of this section shall be equipped with an appropriate vacuum spark advance disconnect device.

(d) The District of Columbia shall submit, no later than January 1, 1974, a detailed compliance schedule showing the steps it will take to implement and enforce this requirement. Such schedule shall include, [sic] as a minimum, the following:

(1) A date by which the District of Columbia will evaluate and approve devices for use in this program. Such date shall be no later than March 1, 1974.

(2) A date by which installation of this equipment shall commence. Such date shall be no later than June 1, 1974.

(3) A date by which all vehicles subject to this section will be equipped with such devices. Such date shall be no later than January 1, 1975.

(4) Designation of any agency or agencies responsible for evaluating and approving such devices for use on vehicles subject to this section.

(5) Designation of an agency or agencies responsible for ensuring that the prohibitions of paragraph (e)(2) of this section shall be enforced.

(6) Method and proposed procedures for ensuring that those persons installing the devices have the training and ability to perform the needed tasks satisfactorily and that an adequate supply of devices will be available.

(7) Provision (apart from the requirements of any program for periodic inspection and maintenance of vehicles generally) for emission testing at the time of device installation or some other positive assurance that the device is installed and operating correctly.

(e) After January 1, 1975, the following shall apply within the District of Columbia portion of the National Capital Interstate Air Quality Control Region.

(1) The District of Columbia shall not register a vehicle subject to this paragraph which is not equipped in accordance with paragraph (c) of this section.

(2) No owner of a light duty vehicle subject to this paragraph shall operate or allow the operation of any such vehicle that is not equipped in accordance with paragraph (c) of this section.

(f) The failure of any person to comply with any provision of this section shall render such person in violation of a requirement of an applicable implementation plan, and subject to enforcement action under section 113 of the Clean Air Act. As to compliance schedules, the District of Columbia will be considered to have failed to comply with the requirements of this regulation if it fails to submit on a timely basis the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.489 Gasoline transfer vapor control.

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of four (4) pounds or greater.

(b) This section is applicable in the District of Columbia portion of the National Capital Interstate Air Quality Control Region.

(c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless such container is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location.

(1) The vapor recovery portion of the system shall include one or more of the following:

(i) A vapor-tight vapor return line from the storage container to the delivery vessel and a device that will ensure that the vapor return line is connected before gasoline can be transferred into the container.

(ii) Refrigeration-condensation system or equivalent designed to recover no less than 90 percent by weight of the organic compounds in the displaced vapor.

(2) The vapor-laden delivery vessel shall be subject to the following conditions:

(i) The delivery vessel must be so designed and maintained as to be vapor-tight at all times.

(ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with a vapor recovery system or the equivalent, which can recover at least 90 percent by weight of the organic compounds in the vapor displaced from the delivery vessel during refilling.

(d) The provisions of this paragraph (c) of this section shall not apply to the following:

(1) Stationary containers having a capacity less than 550 gallons used exclusively for the fueling of implements of husbandry; provided, however, said containers are equipped with submerged fill pipes.

(2) Any container having a capacity less than 2,000 gallons installed prior to promulgation of this paragraph.

(3) Transfer made to storage tanks equipped with floating roofs or their equivalent.

(e) *Compliance schedule.* Except as provided in paragraph (f) of this section, the owner or operator of any source subject to this section shall comply with this section on or before January 31, 1974.

(1) Any owner or operator in compliance with this section on the effective date of this regulation shall certify such compliance to the Administrator no later than 120 days following the effective date of this section.

(2) Any owner or operator who achieves compliance with this section after the effective date of this section shall certify such compliance to the Administrator within 5 days of the date compliance is achieved.

(f) Any owner or operator of a source subject to paragraph (e) of this section may, not later than 120 days following the effective date of this section, submit to the Administrator for approval a proposed compliance schedule that demonstrates compliance with the provisions specified in paragraph (e) of this section as expeditiously as practicable but no later than June 30, 1975. The compliance schedule shall provide for increments of progress toward compliance. The dates for achievement of such increments of progress shall be specified. Increments of progress shall include, but not be limited to:

submittal of final control plan to the Administrator; letting of necessary contracts for construction or process changes or issuance of orders for the purchase of component parts to accomplish emission control or process modification; initiation of on-site construction or installation of emission control equipment or process modification; completion of on-site construction or installation of emission control equipment or process modification; and final compliance.

(g) Any owner or operator who submits a compliance schedule pursuant to this paragraph shall, within 5 days after the deadline for each increment of progress, certify to the Administrator whether or not the required increment of the approved compliance schedule has been met.

#### § 52.491 Elimination of drycleaning losses.

##### (a) Definition:

(1) Drycleaning Operation means that process by which an organic solvent is used in the commercial cleaning of garments and other fabric material.

(b) This section is applicable in the District of Columbia portion of the National Capital Interstate Air Quality Control Region.

(c) After May 31, 1974, no person shall operate a drycleaning operation unless the uncontrolled organic emissions from such operation have been reduced at least 85 percent, except that drycleaning operation emitting less than three (3) pounds per hour and less than fifteen (15) pounds per day are exempt from this regulation.

(d) If incineration is used as a control technique, 90 percent or more of the carbon in the organic compounds being incinerated must be oxidized to carbon dioxide.

(f) Any person who fails to fulfill any requirement of this section shall be in violation of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act.

**§ 52.493 Management of parking supply.**

(a) This section shall apply only in the event that the Administrator finds that the District of Columbia fails to take one or more of the following steps to implement the \$2.00 surcharge (or an equivalent measure):

(1) Complete study identifying locations where surcharge or equivalent measure shall apply and submit to the Administrator by May 30, 1974.

(2) Submit to the Administrator legally adopted regulations of the District of Columbia or other governmental entities to collect the surcharge or impose the equivalent measure by June 30, 1974.

(3) Institute the collection of the surcharge or impose the equivalent measures in those areas identified in the study by April 1, 1975.

(b) In the event the District of Columbia chooses to adopt any "equivalent measure" to this surcharge, the District of Columbia must submit to the Administrator by December 31, 1973, information demonstrating that such measure will in fact achieve the required result. Failure to demonstrate this fact adequately will cause the Administrator to determine that the District of Columbia is failing to implement the surcharge.

(c) In the event that the Administrator determines that the District of Columbia is failing to implement the \$2.00 surcharge (or an equivalent measure) he shall make this determination public in the FEDERAL REGISTER, and this section shall then be immediately effective.

(b) Definitions:

(1) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land to use as a parking facility.

(2) "Modification" means any change to a parking facility which increases the vehicle capacity of such facility.

(3) "Enlargement" means any physical change or addition to a parking facility which increases the vehicle capacity of such facility.

(4) "Commenced" means that an owner or operator has undertaken a continuous program of construction, modification, or enlargement.

(5) "Parking facility" (also called "facility") means any facility, building, structure, or lot or portion thereof used primarily for temporary storage of motor vehicles.

(c) No person, after the effective date of this section, shall commence construction of any new parking facility or modification or enlargement of any existing parking facility until he has first received from the Administrator or from an agency approved by the Administrator a permit stating the construction, modification or enlargement of such facility will not interfere with the attainment or maintenance of applicable Federal air quality standards.

(d) In order for any agency to be approved by the Administrator for purposes of issuing permits for construction of any new parking facility or any modification or enlargement of any existing parking facility, such agency shall demonstrate to the satisfaction of the Administrator that:

(1) Requirements for permit applications and issuance have been established. Such requirements shall include, but not be limited to, a requirement that before a permit may be issued, the following findings of fact or factually supported projections must be made:

(i) The location of the facility.

(ii) The total motor vehicle capacity before and after the construction, modification, or enlargement of the facility.

(iii) The normal hours of operation of the facility and the enterprises and activities which it serves.

(iv) The number of people using or engaging in any enterprises or activities which the facility will serve.

(v) The number of motor vehicles using the facility on an average hourly basis and a peak hour basis.

(vi) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projections shall include data

concerning the availability of public transit from such areas.

(2) Criteria for issuance of permits have been established and published. Such criteria shall include, but shall not be limited to:

(i) Full consideration of all facts contained in the application.

(ii) Provisions that no permit shall be issued if such permit will result in the increase of VMT within any area, the air quality of which fails to meet applicable Federal air quality standards.

(3) Agency procedures provide that no permit for the construction, enlargement or modification of a parking facility covered by this section shall be issued without notice and opportunity for public hearing. The public hearing may be of the legislative type[;] the notice shall conform to the requirements of 40 CFR 51.4(b); and the agency rules of procedure may provide that if no notice of intent to participate in the hearing is received from any member of the public (other than the applicant) prior to 7 days before the scheduled hearing date, no hearing need be held. Such a requirement, if imposed, shall be noted prominently in the required notice of hearing.

#### § 52.490 Control of evaporative losses from the filling of vehicular tanks.

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the District of Columbia portion of the National Capital Interstate Air Quality Control Region.

(c) A person shall not transfer gasoline to an automotive fuel tank from gasoline dispensing systems unless the transfer is made through a fill nozzle designed to:

(1) Effect a vapor-tight fit between the fill nozzle and filler neck of the automotive fuel tank so as to prevent discharge of hydrocarbon vapors to the atmosphere.

(2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 90 percent by weight of the organic compounds in displaced vapors are recovered.

(3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.

(d) The system referred to in paragraph (c) of this section can consist of a vapor-tight vapor return line from the fill nozzle filler neck interface to the dispensing tank or to an adsorption, absorption, incineration, or refrigeration-condensation system or equivalent.

(e) Components of the systems required by § 52.489 (c) can be used for compliance with paragraph (c) of this section.

(f) If demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of fill neck configuration, location, or other design features, the provisions of this paragraph shall not apply to tanks or vehicles existing at the time of promulgation of this regulation.

(g) The District of Columbia shall divide all facilities subject to this section into three classes, the first of which shall equal approximately 70 percent of hydrocarbon emissions from all gasoline stations, the second and third classes shall each equal approximately 15 percent of total hydrocarbon emissions from these sources. The classes shall be known as Class I, Class II, and Class III.

(h) Except as provided in paragraph (k) of this section, the owner or operator of a source included in Class I shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1974.

(2) Initiation of on-site construction or installation of emission control equipment or process change must begin not later than July 31, 1974.

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1975.

(4) Final compliance is to be achieved not later than May 31, 1976.

(5) Any owner or operator of stationary sources, subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(i) The owner or operator of a source included in the Class II shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1975.

(2) Initiation of on-site construction or installation of emissions control equipment or process change must begin not later than July 31, 1975.

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1976.

(4) Final compliance is to be achieved not later than May 31, 1976.

(5) Any owner or operator of stationary sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress; whether or not the required increment of progress has been met.

(j) The owner or operator of a source included in Class III shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1975.

(2) Initiation of on-site construction or installation of emissions control equipment or process change must begin not later than July 31, 1976.

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1977.

(4) Final compliance is to be achieved not later than May 31, 1977.

(5) Any owner or operator of stationary sources, subject to compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(k) Paragraphs (h) and (i) of this section shall not apply:

(1) To a source which is presently in compliance with paragraph (c) of this section and which has certified such compliance to the Administrator by December 31, 1973. The Administrator may request whatever information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the District and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by December 31, 1973, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1975, in the case of Class I sources, and May 31, 1976, in the case of Class II sources. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.

(1) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any

source to which the application of the compliance schedule in paragraph (b) of this section fails to satisfy the requirements of § 51.15(b) and (c) of this chapter.

**§ 52.492 Oxidizing catalyst retrofit.**

(a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of the vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbon and carbon monoxide from that vehicle.

(2) Fleet vehicle means any of 5 or more light duty vehicles operated by the same person(s), business, or governmental entity and used principally in connection with the same or related occupations or uses. This definition shall also include any taxicab (or other light duty gasoline-powered vehicle-for-hire) owned by any individual or business.

(3) Governmental entity means any agency of the executive branch of the Federal Government, or a state or local department, agency, bureau, board, office, commission, district, or unit of any other type (excluding foreign embassies) which employs personnel paid wholly with public funds.

(4) All other items used in this section which are defined in 40 CFR Part 51, Appendix N, are used herein with the meanings so defined.

(b) (1) This section is applicable in the District of Columbia portion of the National Capital Interstate Air Quality Control Region.

(2) Classes of Vehicles Covered: (1) Light duty fleet vehicles of model year 1971 through 1975, not already equipped with catalyst, or certified to meet original 1975 statutory light duty vehicle emission standards.

(c) The District of Columbia shall establish a retrofit program to insure that on or before May 31, 1977, classes of gasoline-powered light duty vehicles as specified in paragraph (b) (2) of this section, which are subject under presently existing legal requirements to registration

in the area defined in paragraph (b) of this section and are used on the streets and highways, of the District, are equipped with an appropriate oxidizing catalyst retrofit device. No later than March 1, 1974, the District of Columbia shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use on motor vehicles subject to this section.

(2) Designation of an agency responsible for ensuring that the provisions of paragraph (c) (3) of this section are enforced.

(3) A provision that starting no later than May 31, 1976, the District of Columbia shall commence retrofitting oxidizing catalysts to those light duty motor vehicles able to operate properly on unleaded 91 RON gasoline. The installation shall be completed by May 31, 1977.

(4) A method and proposed procedure for ensuring that those installing the retrofits have the training and ability to perform the needed tasks satisfactorily and that they will have an adequate supply of retrofit components.

(d) After May 31, 1977, the District shall not register or allow to operate on public streets or highways any light duty gasoline-powered vehicles specified in paragraph (b) (2) of this section which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After May 31, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicles which does not comply with the applicable standards and procedures implementing this section.

(f) The District of Columbia shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section, and the text of needed statutory proposals and needed regulations which it will proposed [sic] for adoption.

The compliance schedule shall include a date by which the District shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1975.

(g) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of applicable implementation plan and subject to enforcement under § 113 of the Clean Air Act. The District will be considered to have failed to comply with the requirements of this regulation if it fails to submit on time the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

[FR Doc. 73-15626 Filed 8-1-73; 8:45 am]

[40 CFR Part 52]

MARYLAND; APPROVAL AND PROMULGATION  
OF IMPLEMENTATION PLANS

Notice of Proposed Rule Making

The transportation control plan submitted by the State of Maryland for attainment of the primary national ambient air quality standards for carbon monoxide and photochemical oxidants (hydrocarbons) in the Metropolitan Baltimore Intrastate Air Quality Region, hereafter called the Metropolitan Baltimore Intrastate Region, was disapproved in part on June 15, 1973. This notice of proposed rule making sets forth regulations which in the Administrator's judgment could be implemented in addition to the approved portions of the Maryland plan to attain and maintain the national standards for carbon monoxide and for photochemical oxidants in the Metropolitan Baltimore Intrastate Region.

If revisions to the State plan are submitted and determined to be approvable prior to Federal promulgation, these proposed regulations will be withdrawn. If revisions to the State plan are submitted and determined to be approvable after Federal promulgation, then those Federal regulations will be rescinded. It is the desire of the Environmental Protection Agency that the plan to attain and maintain the carbon monoxide standard and the photochemical oxidant standard in the Metropolitan Baltimore Intrastate Region be a State plan carried out by the State or its designated representatives.

SUMMARY

Portions of the Maryland plan were not approved on June 15, 1973, because the justification for claimed reductions and the procedures for administration, enforcement, and monitoring of the strategies were not adequate. Although some of the general strategies proposed in the plan were approved, the specific control strategy package was not approved. The specific control strategies in the

State plan did not guarantee a sufficient degree of carbon monoxide and hydrocarbon emission reductions to justify a finding that carbon monoxide and photochemical oxidant air quality standards would be attained.

Maryland, by letter from Governor Marvin Mandel, has made a request for a 2-year extension until May 31, 1977, to meet the carbon monoxide and photochemical oxidant air quality primary standards. This would be the maximum extension permitted under section 110(e) of the Clean Air Act. On January 31, 1973, the opinion of the U.S. Court of Appeals for the District of Columbia in the case of Natural Resources Defense Council Inc., et al. v. Environmental Protection Agency (Civil Action No. 72-1522) and seven related cases required EPA to apply a very stringent standard of review to State extension requests. Maryland's submittal does not itself contain sufficient supporting data on the technical infeasibility of the available control strategies nor does it show adequate consideration of available alternative strategies.

However, based on EPA's own evaluation and analysis we have determined that the hardware necessary for retrofitting substantial numbers of light-duty vehicles with catalytic converters will not be available to meet standards until May 31, 1977. If evidence presented at the public hearings or submitted to the Agency during the comment period indicates that this 2-year extension is not justified, appropriate revisions will be made in our final promulgation.

The EPA-proposed regulations are designed to correct specific deficiencies in the State plan. A regulation is proposed to accelerate the implementation of the Maryland-proposed program which would prohibit the State of Maryland from registering or allowing the operation of vehicles which cannot show proof of satisfactorily passing a loaded emission test. Because the State plan lacks specific assurances of emission reductions from improvements to public transportation, regulations are proposed to establish exclusive bus/carpool lanes, restrict on-street parking, restrict the establishment of addi-

tional parking facilities, and require the establishment of a bus/carpool computer matching system.

A regulation also is proposed to require a Vacuum Spark Advance Disconnect (VSAD) retrofit by 1975 of all pre-1968 light-duty vehicles and an oxidizing catalyst retrofitting by 1977 of certain light-duty vehicles of model years 1968-1975 inclusive. Also proposed are regulations requiring gasoline marketing vapor controls to reduce hydrocarbon loss during transfer of gasoline. As a final assurance of adequate emission reductions, a regulation is proposed to limit gasoline sales in the Region to their base year levels beginning July 1, 1974, and to limit them to 40.5 percent of their base year levels beginning May 31, 1977.

The strategies proposed herein, when taken together with the effects of the Federal Motor Vehicle Control Program, are projected to achieve more than the 57 percent reduction in carbon monoxide base year (1972) emissions required to meet the national ambient air quality standard for carbon monoxide by May 31, 1977, and will achieve the 70 percent reduction in hydrocarbon base year (1972) emissions required to meet the national ambient air quality standards for photochemical oxidants by May 31, 1977 in the Metropolitan Baltimore Intrastate Region.

EPA is also considering the promulgation of additional control measures and requests public comment on the applicability of these measures to the Metropolitan Baltimore Intrastate Region. Candidate measures include phased reductions of public parking facilities, motorcycle limitation programs, the expanded use of any existing rail right-of-way, and establishment of bikeways.

In addition, EPA is evaluating the potential of increasing the stringency of certain proposed regulatory measures. The proposed inspection and maintenance regulations incorporate a 30 percent failure rate which could be expanded to 50 percent and gain additional emission reductions. Furthermore, Maryland has in effect regulations for organic solvent use and control of degreasing operations. Though these regulations are believed to be

reasonable, further examination may indicate that additionally stringent measures are necessary. Pending review of public comments and additional EPA evaluation of these control measures and/or modifications, EPA may include some, if not all, of these potential strategies in the final promulgation.

#### TRANSPORTATION CONTROL ALTERNATIVES

Analysis of the air quality problems in the State of Maryland reveals a photochemical oxidant problem and a carbon monoxide problem within the Metropolitan Baltimore Intrastate Region.

Since a substantial proportion of the photochemical oxidant problem and virtually all of the carbon monoxide problem stems from emissions from individual motor vehicles, measures to reduce emissions and measures to reduce vehicular travel can be effective in improving air quality. Reductions in emissions from vehicles can also be obtained through inspection and maintenance programs and from incorporation of various retrofit devices. Reductions in Vehicle Miles Traveled (VMT) can be achieved through various pricing and taxing schemes for road use, adoption of parking restrictions and/or limitations of available number of parking spaces, and programs promoting the use of bus/carpools.

Direct vehicle restraints may also be necessary. These can take the form of limitations on gasoline distribution or of restricting access of vehicles to areas of high pollutant concentrations. In the Metropolitan Baltimore Intrastate Region, where the greatest threat to air quality is an area-wide photochemical oxidant pollution generated by hydrocarbon emissions, an area-wide limitation on gasoline distribution would be an effective approach.

In solving the pollution problem, improvements to public transportation are a desirable and effective complement to restraints on automobile use. Such improvements as greater coverage, increased frequency of service, improved reliability, improved comfort, and adequate personal security would further encourage the use of public transit alternatives.

#### PROPOSED ADDITIONAL CONTROL STRATEGIES

The Maryland plan as amended by the June 15, 1973 submission, attempts to demonstrate attainment of the photochemical oxidant and carbon monoxide air quality standards through utilization of five general measures: the Federal Motor Vehicle Emissions Control Program; a State-wide, State-run Motor Vehicle Inspection Program for all gasoline-powered vehicles; improvements to public transportation; retrofit of heavy-duty gasoline-powered vehicles; and major stationary source restrictions.

The Maryland plan, which utilizes data gathered in the physical area defined by the Baltimore Metropolitan Area Transportation Study (BMATS), reports peak-period hydrocarbon emissions were 57.7 tons and carbon monoxide emissions were 507,800 tons per year in 1972. In order to demonstrate attainment of the standards, the State of Maryland calculations indicate that hydrocarbon emissions must be reduced by 70 percent of the 1972 emissions in the BMATS area to a level of 17.3 tons/peak period and that carbon monoxide emissions must be reduced in the BMATS area to a level of 217,800 tons/year.

Including projected increases in vehicle miles of travel, the Federal Motor Vehicle Emissions Control Program will reduce hydrocarbon peak-period emissions by 31 percent to 39.7 tons and will reduce carbon monoxide emissions by 32 percent to 345,100 tons/year by 1977. These estimates are adjusted to include the 1975 interim motor vehicle emission standards as announced on April 11, 1973.

To provide the required additional reductions to attain the national ambient air quality standards as expeditiously as practical, several measures for controlling mobile sources and reducing VMT are proposed. Mobile source controls include the early initiation of a State vehicle inspection program and the retrofitting of certain light-duty gasoline-powered vehicles. VMT reductions to be realized through improvements to public transportation are augmented and supported by proposed measures

providing for encouragement of bus/carpools, parking restrictions and limitations, and a gasoline distribution limitation.

In order to ensure that national ambient air quality standards will be achieved as expeditiously as practicable, the following VMT reduction measures will be implemented by May 31, 1975:

1. Gasoline distribution limitations to their base year (July 1, 1972-June 30, 1973) levels.
2. Public transportation improvements including exclusive bus lanes and parking restrictions.

Moreover, the Administrator is considering the promulgation of additional control strategies which he believes can possibly provide further support to assure attainment of the needed reduction in VMT. The Administrator encourages testimony on a program calling for the phased reduction of public parking spaces in the CBD and other trip attraction centers by as much as 20 percent by mid-1975. Also solicited is testimony on the possibility and advisability of the expanded use of existing rail right-of-way and motorcycle limitation programs.

The final promulgation may include measures not explicitly proposed herein if, on the basis of information provided to the Administrator, they appear at the time of the final promulgation to be the most effective and reasonable means of attaining standards.

#### PROPOSED REDUCTIONS IN VMT

According to the Maryland plan, improvements to public transportation are credited with reducing vehicle miles of travel by 13 percent in the BMATS area. This VMT reduction is expected to reduce by 13 percent light-duty mobile emissions of both hydrocarbons and carbon monoxide in that area. Improvements proposed include establishing exclusive bus lanes, purchase of new buses, and promotion of carpools; however, implementation schedules are not firm and hence provide no assurance for claimed reductions. To help ensure that the State's reductions

claimed for mass transportation improvements will be achieved, the Environmental Protection Agency is proposing four additional regulations: provision of exclusive bus/carpool lanes, limitation of on-street parking on those streets with exclusive bus lanes, limitations on the construction of additional parking facilities, and the establishment of a computerized bus/carpool service.

Although the implementation of stationary source controls, inspection/maintenance of light-duty gasoline-powered vehicles, improvements to public transportation, retrofit of certain light-duty gasoline vehicles, and the above four additional regulations will enable the carbon monoxide standard to be achieved in 1977, these measures alone will not be sufficient to meet the standards for photochemical oxidants by 1977.

An additional reduction of 11.5 tons/peak period of hydrocarbon emissions is required. To attain this reduction, EPA proposes a phased gasoline distribution limitation, by limiting gasoline distribution by mid-1975 to the base year level and by reducing the distribution by mid-1977 to 40.5 percent of the base year level.

The Clean Air Act of 1970 requires attainment of the national ambient air quality standard as expeditiously as practicable but in no case later than May 31, 1975, unless the necessary technology or other control methods are not reasonably available by that date. In the latter event, an extension of time for achieving the standards until no later than May 31, 1977, may be granted, but all reasonably available alternatives must be implemented by May 31, 1975, along with such measures during the pre-1977 interim period as are deemed to be reasonably available. In the Metropolitan Baltimore Intrastate Region, a number of reasonable strategies (inspection/maintenance, gasoline distribution limitation, vacuum spark advance disconnect for light-duty vehicles, volatile organic loading facilities, preferential bus treatment, on-street parking and new parking facility limitations, and a computerized bus/carpool service) will be operative in 1975. However, because of hardware unavailability and long lead times involved in the acquisition of mass trans-

portation equipment and in the installation of advance retrofit devices, the total strategy cannot be completed until May 31, 1977. The gasoline distribution limitation strategy must, by its very nature, rely heavily on the other proposed strategies. The percentage reduction in 1977 from the gasoline limitation program is projected to be 59.5 percent of the base year levels of gasoline consumption.

The proposals described above are the only ones for which regulatory language has been included in this proposal. However, EPA will also consider other VMT reduction measures as part of this rulemaking proceeding, and they may be included in the final promulgation if they are found to be the most feasible methods for achieving the standards. In particular, EPA will explore the possibility of reducing VMT by the phased reduction of the number of public parking spaces in CBD's and other trip attraction centers by as much as 20 percent by mid-1975, establishment of a more sophisticated mass transit system, selective conversion of traffic lanes on roads to the exclusive use of buses and car pools, adoption of more restrictive on-street parking regulations, increased parking charges, and adoption of more stringent enforcement methods. Measures to promote the use of bicycles and to limit the use of motorcycles will also be considered. Comments on these and other VMT reduction measures are particularly solicited.

#### PROPOSED CONTROLS ON STATIONARY SOURCES

Although Maryland has either existing or proposed regulations to control stationary sources, its proposal to reduce hydrocarbon emissions through vapor recovery during service station and automobile tank refueling operations was not supported by proposed regulations which the State committed itself to adopt as required by 40 CFR 51.14(a)(ii). In the plan addendum of June 28, 1973, Maryland's intent to adopt such regulations was indicated. This submission is now being evaluated. To ensure the reduction of 1.8 tons/peak period claimed for

this measure, EPA is proposing a regulation to require 90 percent recovery of hydrocarbon vapors during loading of service station storage tanks and during transfer of gasoline to automobiles. If the Maryland proposal of June 28, 1973, is satisfactory, the regulation proposed by EPA herein will be withdrawn.

Existing organic solvent regulations require that all present drycleaning installations emitting more than 200 pounds per day of photochemically reactive hydrocarbons shall reduce present emissions by at least 85 percent, and that the limit for new installations shall be 40 pounds per day. Although the full effect of the existing regulations through natural attrition would not be felt until 1987, the additional requirement that all solvent users must be fully controlled by 85 percent of uncontrolled emissions would result in a negligible reduction of 0.03 tons per peak period, or 0.14 percent of the reduction required to meet the primary ambient air quality standards by May 31, 1977. The administrator is aware of Maryland's ongoing program for the control of hydrocarbon emissions from dry-cleaning installations and is presently evaluating the proposed regulation which would accelerate the program by attaining full compliance by the proposed May 31, 1974 date. Consequently, no regulation is being proposed by EPA at this time on the assumption that Maryland is proceeding expeditiously to control this relatively small source category of hydrocarbon emissions.

The Environmental Protection Agency has also examined Maryland's regulations governing emissions of organic solvents resulting from degreasing operations and from evaporation from surface and architectural coatings. For [degreasing] operations, there are no specific constraints on nonreactive material that may be used, such as perchlorethylene or saturated halogenated hydrocarbons that are in use elsewhere. Comments are solicited on whether degreasing operations in the Metropolitan Baltimore Intrastate Region are a significant source of reactive hydrocarbon emissions for which a specific regulation should be promulgated.

Emissions of other solvents in the Metropolitan Baltimore Intrastate Region were also investigated. It has been determined that technology does exist to control more efficiently the emissions of a number of the smaller heating (15 to 200 lb/day category) and spraying operations (40 to 200 lb/day category) involving organic solvents. Their estimated total peak-period emission is 0.10 ton or 0.47 percent of the reduction required to meet the primary ambient air quality standards by May 31, 1977. Comments are solicited as to whether it is feasible or practicable to require additional controls on these sources, many of which are presumably located on premises of small firms. If these comments indicate that further controls are needed, then the Administrator proposes to promulgate regulations equivalent to those currently adopted by the County of Los Angeles Air Pollution Control District as Rule 66. Other minor relaxations from L.A. Rule 66 involve evaporative emissions from gallon (or smaller) containers of architectural coating compounds and from the allowable disposal limits of waste solvent materials. No data are presently available to the Administrator on the atmospheric burden that may be created by such evaporative emissions, which are presently believed to be very small.

Even if the Administrator should determine that Maryland's existing regulations for control of solvent emissions as discussed above need not be augmented at this time, they will be the subject of continuing examination and their rigorous enforcement will be monitored.

#### PROPOSED CONTROLS ON MOBILE SOURCES

In the plan addendum of June 28, 1973, it is stated that legislative authorization funding measures, etc., are needed to implement Maryland's proposed inspection and maintenance program. The tentative implementation timetable proposed by Maryland shows the commencing of the 20-month program on January 1, 1975, following an assumed passage of legislation, and completion by September 1, 1976. Under the requirements of the Clean Air Act, the States must proceed as expeditiously as

practicable to attain primary air quality standards. In an effort to ensure the earliest possible initiation of Maryland's inspection and maintenance program, the Administrator is proposing a regulation to require implementation of the system to begin by March 1, 1974, and actual commencement of the inspection program by August 1, 1975. The duration of this timetable is very close to that proposed by Maryland. The Maryland plan proposes an emission inspection program for all light- and heavy-duty gasoline-powered vehicles; a 12 percent hydrocarbon emission reduction and a 10 percent carbon monoxide emission reduction for all such vehicles is claimed through the use of a loaded-test inspection/maintenance program. These values are consistent with those presented in CFR Part 51, Appendix N. Both the Maryland and EPA proposals assume an initial 30 percent failure rate criterion. Comments are solicited on the desirability of establishing an initial 50 percent failure rate criterion, which calculations indicate would give an additional reduction of 0.1 ton of hydrocarbons per peak-period emission.

A full EPA review of the June 28, 1973, addendum is now in progress. This review will determine the degree of acceptability for both the establishment of the inspection and maintenance system itself and the subsequent inspection program. Comments are also solicited from the public and other interested parties on all aspects of the program. It is the Administrator's wish that the final promulgation incorporate as much of the Maryland-proposed program as can be found acceptable.

On June 15, 1973, and as subsequently amended on June 28, 1973, and on July 9, 1973, Maryland proposed retrofit of heavy-duty gasoline-powered vehicles with devices capable of reducing hydrocarbon and carbon monoxide emissions by 50 percent. EPA is unable to accept this proposal at this time because there has not been sufficient time for an adequate review of this proposal. Although a proposed implementation timetable has been included in Maryland's latest proposal, cooperative arrangements with jurisdictions proposing a heavy-duty

retrofit program have not been indicated. EPA, however, encourages Maryland's intended efforts in this direction.

EPA proposes retrofit of pre-1968 light-duty vehicles with approved Vacuum Spark Advance Disconnect (VSAD) devices and of certain 1968-1975 light-duty vehicles with oxidizing catalyst devices. The VSAD device is expected to reduce hydrocarbon emissions by 20 percent per vehicle and carbon monoxide emissions by 9 percent per vehicle. The oxidizing catalyst device is expected to reduce both hydrocarbon and carbon monoxide emissions by 50 percent per vehicle. Only those cars of 1968-1975 model years which run on gasoline with a research octane number (RON) of 91 can be fitted with this device because of technical constraints. In addition, this gasoline must be unleaded. Exemptions will be allowed for all 1975 model year vehicles originally equipped with the oxidizing catalytic converter, or those vehicles which are certified to meet the original statutory Federal emission standards for 1975. National estimates indicate that approximately 20 percent of the 1968-1970 model year vehicles and 75 percent of the 1971-1975 model year vehicles would be retrofitted under this proposal.

#### SUMMARY OF EFFECTS

The estimated combined effect of the State transportation control measures approved by EPA and Federally proposed regulation are presented in the following table.

Federally proposed regulations are intended to strengthen, supplement, and expand, not wholly replace, State transportation control measures approved by EPA.

COMPILED OF CONTROL STRATEGY EFFECTS FOR THE METROPOLITAN BALTIMORE INTRASTATE AIR QUALITY CONTROL REGION ON MAY 31, 1977

	Carbon Monoxide		Hydrocarbons	
	Tons per Year	Percent of Total Reduction Required	Tons per Peak Period (6-9 am)	Percent of Total Reduction Required
Stationary Source Emissions Without Control Strategy	103,000			13.4
Expected Reduction:				
a) Current Regulations (1)	-5,575	-4.4%	1.5	6.5%
b) Gasoline Handling Vapor Recovery(2)	0	0	1.8	8.1%
c) Other Stationary Source(1)	500	0.4%	0.5	2.4%
Rule Strengthening				
Stationary Source Emissions Remaining	108,075			9.6
Mobile Emissions from Highway Light- and Heavy-Duty Vehicles without Control Strategy (Credit taken for FMVCP)	242,100			26.3
Expected Reduction:				
a) Inspection and Maintenance(2)	15,500	12.2%	2.1	9.4%
b) Mass Transit Improvements(2)	20,400	16.0%	1.8	8.1%
c) VSAD Retrofit pre-1968 LDV(3)	1,400	1.1%	0.3	1.3%
d) LDV Catalytic Retrofit 1968-1975(3)	33,000	25.9%	2.9	12.9%
e) Gasoline Distribution Limitation(3)	103,200	81.1%	11.5	51.3%
Mobile Emissions Remaining	68,600			7.7
Total Emissions without Strategy	345,100			39.7
Total Reduction	168,425	132%	22.4	100%
Total Emissions Remaining	176,675			17.8
Total Reduction Required	127,800			22.4

(1) Approved State strategy.

(2) State strategies modified by EPA.

(3) EPA proposed strategy.

#### IMPLEMENTATION PROCEDURES

Implementation of the strategies provided for by the regulations proposed herein is the key to the success of the air quality improvement program for the Metropolitan Baltimore Intrastate Region. Therefore, the proposed regulations also provide for the development of any necessary administrative procedures; schedules of compliance by sources; and surveillance, monitoring, and enforcement activities.

In all cases where VMT reduction measures are being proposed by regulations, the State or city will be required to take steps to accomplish the intended result. If this is not done, penalties for violation of the Clean Air Act may be assessed. It is EPA's position that it may re-

quire States or cities to enforce regulations that are related to their position as owners of roads. As owners of roads, States and cities may be held directly responsible for the pollution caused by those roads and by the traffic which the roads make possible, and they may be required to take such steps as are necessary to ensure that the roads and the activities carried out on them cease to cause violations of air quality standards. Regulations have accordingly been drafted to impose enforcement responsibility on the States or cities only where the activity being regulated was, in the judgment of EPA, closely enough related to the government's position as owner of the roads to justify the imposition of responsibility under this theory.

#### ECONOMIC AND SOCIAL IMPACT

The social and economic consequences of the majority of the measures included in the Maryland plan or proposed herein are considered reasonable. For example, the inspection and maintenance procedures will require expenses of approximately \$10 annually for the average vehicle inspected. The implementation of the VSAD retrofit program of pre-1968 vehicles will require that individual motorists pay approximately \$20 installation costs. Distributed costs of the various Maryland proposed mass transportation and fuel-handling improvement measures, as well as those supplemental strategies proposed by EPA providing incentives for the use of express buses and car pools and disincentives on the use of automobiles by individual motorist-commuters, are also considered reasonable. In addition, these measures are expected to benefit the public from the standpoint of improved traffic flow for commuters, general urban mobility, and a decrease in energy consumption.

On the other hand, while the collective benefits to be derived from the catalytic converter retrofit program are significant, the average price to the individual motorist is \$135 per vehicle. However, the cost of this proposal could be ameliorated by the imposition of a state financed

retrofit program which would spread the cost over the entire vehicle population. Such a program might be financed through a gasoline tax or vehicle registration fee.

The most stringent proposal would require in 1977 a gasoline sales reduction of 59.5 percent from base year levels. This would affect nearly every economic and social activity in the Metropolitan Baltimore Intrastate Region. It is not possible at this time to calculate the economic and social cost to the community of this proposal. However, it must be recognized that under the requirements of the Clean Air Act, the Administrator must help provide for attainment of air quality standards as expeditiously as practicable. It is for this reason that the Administrator solicits suggestions on all possible measures which will ease the burden of the more severe strategies considered. The Administrator recognizes that there are significant positive aspects to VMT reductions. These VMT reductions may well lessen the need for currently envisioned urban interstate highways. Many experts believe that the sprawling development patterns fostered by widespread automobile use are unduly wasteful of energy, land, and other resources, and have contributed to the decay of urban centers. Widespread use of other modes of transportation will be necessary if these adverse tendencies are to be corrected.

Greater use of mass transit and car pooling may well stimulate the switch to a 4-day week by major industries. This, in turn, may result in further reductions in VMT and/or total emissions, at least in the CBD. Gasoline limitation measures would stimulate the need for additional mass transit and/or car pooling, thus resulting in further reductions of the total emissions.

In summary, the Agency has responded to the order of the United States Court of Appeals for the District of Columbia Circuit and proposes a plan to attain and maintain air quality standards in the Metropolitan Baltimore Intrastate Region by May 31, 1977. In this proposed plan for attainment of standards by May 31, 1977, the Agency proposes to grant the maximum extension allowed by law. Even with this extension, the plan would

result in social and economic consequences which must be considered severe. The public hearing scheduled on these proposals should focus not only on the reasonableness or unreasonableness of the proposed plan, but also on what steps can be taken to clean up the air and maintain air quality standards beyond 1977.

#### MASS TRANSPORTATION

Improvements and expansion of the existing mass transportation facilities in the Baltimore Metropolitan area (the so-called Baltimore Metropolitan Area Transportation Study—BMATS) are integral to the proposed reduction in VMT obtained as a result of disincentives and restraints on the personal use of automobiles primarily within the BMATS area.

Since mid-1971, all transit functions in Baltimore City have been the responsibility of the Mass Transit Administration (MTA) of the Maryland Department of Transportation. The Baltimore Transit Company had been purchased in 1970 by the predecessor agency, the Metropolitan Transit Authority. MTA is responsible for planning, programming and implementing mass transit services in the Metropolitan Transit District, which is comprised of Baltimore City, Baltimore County, and Anne Arundel County. MTA has taken over four suburban transit companies. Thus, the entire metropolitan transit system is State owned and operated.

In addition to bus transit, MTA is planning and developing a regional rail rapid transit system in coordination with the Regional Planning Council. The Urban Mass Transportation Administration (UMTA) has recently granted \$22.5 million to help finance construction of the first phase of the system. The local one-third of funds will come from the Maryland Department of Transportation.

There are few apparent legal or institutional obstacles to improved transit services, or even reduced transit fares at the State level. Local policy is one of support for public transit. There is a question of economic policy,

however, related to the mandate of MTA to support all costs incurred for construction, acquisition, operation, and maintenance of transit facilities "as far as practicable" from the fare box and Federal funding grants. Presently no funds are available from Federal sources to subsidize operating losses; therefore, it would be necessary for the State to review policy related to operating losses caused by new services or reduced fares.

Present planning calls for many transit service improvements, including acquisition of at least 100 new buses in 1973. An application to UMTA to support this plan was submitted in January. The transit technical study (T9-5) is in the review stages, but it may be expected to recommend further service improvements.

Expanded mass transit facilities are essential to the success of any air pollution control strategy for the Metropolitan Baltimore area. The Administrator, therefore, encourages transit expansion in this area, and he will provide all possible support to efforts by Federal, State, local governmental, and private groups to expand the mass transit facilities.

#### PUBLIC COMMENTS SOLICITED

Although the Administrator has concluded that the proposed plan is the best approach available to him at the present time for achieving compliance with the requirements of the Act, further analysis may demonstrate that more appropriate options are available. He therefore desires to obtain the comments and suggestions of the public on the problems of achieving the ambient air quality standards in the Metropolitan Baltimore Intra-state Region. Comments are particularly invited pertaining to measures that may be taken by Federal, State, or local authorities to support or supplement the proposed air pollution control measures to implement these measures and to compare social and economic effects of alternative pollution control measures.

Public hearings will be held in Baltimore on September 5, 1973, at 10:00 a.m. in the Carroll Room, Baltimore Hilton Hotel, 101 West Fayette Street. Further notice of these hearings, including locations where EPA proposals can be inspected, will be published in the Baltimore area.

The Administrator's final promulgation of transportation controls for the Metropolitan Baltimore area will consider the comments and testimony he receives, as well as any additional approvable strategies submitted by the State before or at the hearing as part of the State plan. These influences, and the additional analysis of alternative strategies that can be made in the time between this proposal and final promulgation, may lead the Administrator to adopt final regulations that differ in significant ways from this proposal.

#### SUBMITTAL OF WRITTEN COMMENTS

Interested persons may participate in this rule making by submitting written comments, preferably in triplicate, to the Regional Administrator, EPA Region III, Curtis Building, 6th and Walnut Streets, Philadelphia, Pennsylvania 19106. All relevant comments received not later than September 4, 1973 will be considered. Receipt of comments will be acknowledged, but substantive responses to individual comments will not be provided. Comments received will be available for public inspection during normal business hours at the EPA Region III Office, and at locations to be announced in the Baltimore area. This notice of proposed rule making is issued under the authority of section 110(c) and 301(a) of the Clean Air Act (42 U.S.C. 1857 et seq.).

#### EPA STUDIES AND GUIDELINES

Further information on transportation control, land use, and motor vehicle emissions may be obtained from one or more of the following documents which the Environmental Protection Agency has published:

1. "Prediction of the Effects of Transportation Controls on Air Quality in Major Metropolitan Areas" and "Evaluating Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas," November 1972. Both of these documents are generally known as the "Six Cities Study."
2. "Transportation Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas," December 1972. This document is a summary of a study of 14 cities conducted with the view of recommending specific transportation control strategies. (Separate reports for each of the 14 cities are also available.) The documents listed in 1 and 2 above are available from the Air Pollution Technical Information Center, EPA, Research Triangle Park, North Carolina 27711.
3. "Control Strategies for In-Use Vehicles," November 1972. This report is available from EPA, Mobile Source Pollution Control Programs, 401 M Street, SW., Washington, D.C. 20460.
4. "Transportation Control Measures," *Federal Register* (38 FR 15194), June 8, 1973.
5. "Transportation Controls to Reduce Motor Vehicle Emissions in Baltimore, Maryland," APTD-1443 (December 1972), available from EPA, Office of Air and Water Programs, Research Triangle Park, North Carolina 27711.

(42 U.S.C. 1857 et seq.)

Dated: July 24, 1973.

ROBERT W. FRI,  
*Acting Administrator.*

It is proposed to amend Part 52 of Chapter 1 of Title 40 of the Code of Federal Regulations by adding the following:

## Subpart V—Maryland

## § 52.1085 Inspection and maintenance.

## (a) Definitions:

(1) "Inspection and maintenance program" means a program to reduce emissions from in-use vehicle by identifying vehicles which need emission-control-related maintenance and requiring that maintenance be performed.

(2) "Precontrolled vehicles" means light-duty vehicles sold nationally (except California) prior to the 1968 model year and light-duty vehicles sold in California prior to the 1966 model year.

(3) "Controlled vehicles" means light-duty vehicles sold nationally (except California) in the 1968 model year and later and light-duty vehicles sold in California in the 1966 model year and later.

(4) "Loaded emissions test" means a sampling procedure for exhaust emissions which requires testing the engine under stress (i.e., loading) by use of a chassis dynamometer to simulate actual driving conditions. As a minimum requirement, the loaded emission test must include running the vehicle and measuring exhaust emissions at two speeds and loads other than idle.

(5) "Idle emission test" means a sampling procedure for exhaust emissions which requires operation of the engine in the idle mode only. At a minimum, the idle test must consist of the following procedures carried out on a fully warmed-up engine: a verification that the idle RPM is within manufacturer's specified limits and a measurement of the exhaust carbon monoxide and/or hydrocarbon concentrations during the period of time from 15 to 25 seconds after the engine was used to move the car or was run at 2000 to 2500 RPM with no load for 2 to 3 seconds.

(6) "Retrofit" means the addition or removal of an item of equipment, or a required adjustment, connection, or disconnection of an existing item of equipment, for the purpose of reducing emissions.

(7) "Idle adjustment" means a series of adjustments which include RPM, idle air/fuel ratio and basic timing.

(8) "Initial failure rate" means the percentage of vehicles rejected because of excessive emissions of a single pollutant during the first inspection cycle of an inspection/maintenance program. (If inspection is conducted for more than one pollutant, the total failure rate may be higher than the failure rates for each single pollutant.)

(b) This regulation is applicable within the geographical confines of the State of Maryland.

(c) The State of Maryland shall submit to the Administrator of EPA or his designee, no later than January 1, 1974, a detailed compliance schedule showing the steps that will be taken to establish and enforce an inspection and maintenance program pursuant to paragraph (d) of this section.

The compliance schedule shall include:

(1) The text of any necessary statutory proposals and regulations that are needed to carry out the inspection/maintenance system.

(2) A detailed timetable describing the steps that must be taken and when these steps will be taken to ensure the timely submittal of the needed legislation to the legislature and to ensure timely adoption of the regulations needed for paragraph (d) of this section.

(3) A detailed timetable describing the dates of ordering and of acquisition of necessary equipment.

(4) A signed statement by the chief executive or his designee identifying the sources and amounts of funding for the inspection/maintenance program and a timetable to ensure that proper funding levels are available. If funds cannot legally be obligated under existing statutory authority, the text of the needed legislation shall be submitted to the Administrator of the Environmental Protection Agency or his designee pursuant to paragraph (c) (1) of this section.

(d) The State of Maryland shall establish an inspection and maintenance program applicable to all light-duty gasoline-powered vehicles registered within its confines. No later than March 1, 1974, the State of Maryland shall submit to the Environmental Protection Agency

legally adopted regulations establishing such a program. The regulations shall include:

(1) Provisions for the inspection of all gasoline-powered light-duty vehicles at periodic intervals of no more than one year by means of a loaded (dynamometer) test.

(2) Provisions for inspection failure criteria consistent with the emission reduction claimed in the plan for the strategy. These criteria shall include an initial failure rate of 30 percent (see definitions).

(3) Provisions to ensure that failed vehicles receive the maintenance necessary to achieve compliance with the inspection standards. This shall include sanctions against individual owners and repair facilities, retest of failed vehicles following maintenance, a certification program to ensure that repair facilities performing the required maintenance have the necessary equipment, parts and knowledge to perform the tasks satisfactorily, and such other measures as may be necessary or appropriate.

(4) A program of enforcement to ensure that vehicles are not intentionally readjusted or modified subsequent to the inspection and/or maintenance in such a way as would cause them to no longer comply with the inspection standards. This might include spot checks of idle adjustments and/or a suitable type of physical tagging.

(5) Delineation of the agency or agencies responsible for conducting, overseeing and enforcing the inspection and maintenance program.

(6) Provisions for beginning the first inspection cycle by August 1, 1975, and completing it by July 31, 1976.

(e) After July 31, 1976, the State of Maryland shall not register nor allow to operate on its streets or highways vehicles which fall within this regulation and have not complied with the applicable standards and procedures of paragraph (d) of this section. This shall not apply to the initial registration of a new motor vehicle.

(f) After July 31, 1976, no owner of a vehicle which is affected by this regulation shall operate or allow to be operated a vehicle which does not comply with the ap-

plicable standards and procedures of paragraph (d) of this section. This shall not apply to the initial registration of a new motor vehicle.

#### § 52.1086 Bus/carpool computer matching system.

##### (a) Definitions:

(1) "Bus/carpool matching" means assembling lists of commuters sharing similar travel needs. The number of commuters on each list identifies potential bus/carpools.

(2) "Time-origin-destination (TOD) information" means information that identifies a commuter's work schedule, home and work location.

(3) All other terms used in this section which are defined in 40 CFR Part 51, Appendix N, are used herein with the meanings so defined.

(b) This section is applicable in the Metropolitan Baltimore Intrastate Air Quality Control Region (hereafter referred to as the Region).

(c) Beginning March 1, 1974, the State of Maryland shall establish a computer-aided bus/carpool matching system which is conveniently available to all employees in businesses having more than 10 employees within the Region who operate light-duty vehicles on streets or highways over which it has ownership or control. No later than December 1, 1973, the State shall submit legally adopted regulations to the EPA establishing such a system. The regulations shall include:

(1) A method of collecting information which will include the following as a minimum:

(i) Provisions for each affected employee to receive an application form with a cover letter describing the matching program.

(ii) Provisions on each application for applicant identification of time, origin, and destination, and the applicant's desire to drive only, ride only, or share driving.

(2) A computer method of matching information that will have provisions for locating each applicant's origin and destination within a grid system in the urban area and suburban region surrounding it and matching ap-

plicants with identical origin and destination grids and compatible work schedules.

(3) A method for providing continuing service such that the master list of all applicants is retained and available for use by new applicants; applications are currently available; and the master list is periodically updated to remove applicants who have moved from the area served.

(4) An agency or agencies responsible for operating, overseeing and maintaining the bus/carpool computer matching system.

(d) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act.

#### § 52.1087 Management of parking supply.

##### (a) Definitions:

(1) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land for use as a facility.

(2) "Modification" means any change to a parking facility which increases the vehicle capacity of such facility.

(3) "Enlargement" means any physical change or addition to a parking facility which increases the vehicle capacity of such facility.

(4) "Commenced" means that an owner or operator has undertaken a continuous program of construction, modification, or enlargement.

(5) "Parking facility" (also called "facility") means any facility, building, structure, or lot, or portion thereof used primarily for temporary storage of motor vehicles.

(b) This regulation is applicable in the Metropolitan Baltimore Intrastate Air Quality Control Region.

(c) No person, after August 15, 1973, shall commence construction of any new parking facility or modification or enlargement of any existing parking facility until he

has first received from the Administrator or from an agency approved by the Administrator a permit stating that construction, modification, or enlargement of such facility will not interfere with the attainment or maintenance of applicable Federal air quality standards.

(d) In order for any agency to be approved by the Administrator for purposes of issuing permits for construction of any new parking facility or any modification or enlargement of any existing parking facility, such agency shall demonstrate to the satisfaction of the Administrator that:

(1) Requirements for permit applications and issuance have been established. Such requirements shall include, but not be limited to, a condition that before a permit may be issued the following findings of fact or factually supported projections must be made:

(i) The location of the facility.

(ii) The total motor vehicle capacity before and after the construction, modification, or enlargement of the facility.

(iii) The normal hours of operation of the facility and the enterprises and activities which it serves.

(iv) The number of people using or engaging in any enterprises or activities which the proposed facility will serve.

(v) The number of motor vehicles using the proposed facility on an average hourly basis and a peak hour basis.

(vi) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projections shall include data concerning the availability of public transit from such areas.

(2) Criteria for issuance of permits have been established and published. Such criteria shall include but not be limited to:

(i) Full consideration of all facts contained in the application.

(ii) Provisions that no permit shall be issued if such permit will result in the increase of vehicle miles of

travel within any area the air quality of which fails to meet applicable Federal air quality standards.

(3) Agency procedures provide that no permit for the construction, enlargement, or modification of a facility covered by this section shall be issued without notice and opportunity for public hearing. The public hearing may be of the legislative type; the notice shall conform to the requirements of 40 CFR 51.4(b); and the agency rules of procedure may provide that if no notice of intent to participate in the hearing is received from any member of the public (other than the applicant) prior to 7 days before the scheduled hearing date, no hearing need be held. If notice of intent to participate is required, that fact shall be noted prominently in the required notice of hearing.

#### § 52.1088 Limitation of public parking.

(a) The term "on-street parking" means leaving a vehicle on a street or sidewalk and also includes stopping for any purpose other than the momentary and immediate pickup or discharge of passengers. A prohibition of "on-street parking" under this section includes a prohibition against stopping for the purpose of effecting any delivery of goods.

(b) The following provisions apply to all areas within the City of Baltimore and the counties of Baltimore, Howard, and Anne Arundel, which are in the Metropolitan Baltimore Intrastate Air Quality Control Region.

##### (c) On-street parking limitations:

(1) Beginning January 1, 1974, the City of Baltimore and all municipalities in the counties described above shall prohibit on-street parking, Monday through Saturday, on all streets and highways over which they have ownership or control and which contain express bus/carpool lanes. The prohibition against "on-street parking" on any particular street or highway shall be only for the period during which the particular street or highway has a lane or lanes reserved for buses, carpools, or buses and carpools. The prohibition shall state that vehicles parked

in violation of the prohibition shall be towed away, or the owner shall be subject to a fine of up to \$100 per violation, or both, depending on the circumstances of the violation.

(2) Beginning January 1, 1974, the counties of Baltimore, Howard, and Anne Arundel shall prohibit on-street parking, Monday through Saturday, on all streets and highways over which they have ownership or control and which contain bus/carpool lanes. The prohibition against "on-street parking" on any particular street or highway shall be only for the period during which the particular street or highway has a lane or lanes reserved for buses, carpools, or buses and carpools. The prohibition shall state that vehicles parked in violation shall be towed away, or the owner shall be subject to a fine of up to \$100 per violation, or both, depending on the circumstances of the violation.

(3) Beginning on January 1, 1974, the State of Maryland shall prohibit on-street parking, Monday through Saturday, on streets and highways over which it has ownership or control and which contain express bus/carpool lanes. The prohibition against "on-street parking" on any particular street or highway shall be only for the period during which the particular street or highway has a lane or lanes reserved for buses, carpools, or buses and carpools. The prohibition shall state that vehicles parked in violation of the prohibition shall be towed away, or the owner shall be subject to a fine of up to \$100 for violation, or both, depending on the circumstances of the violation.

(d) Failure to comply with any provision of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan, and subject to enforcement under section 113 of the Clean Air Act.

#### § 52.1089 Preferential bus/carpool treatment.

##### (a) Definitions:

(1) "Carpool" means a vehicle containing three or more persons.

(2) "Bus/carpool lane" means a lane or a street or highway open only to buses (or buses and carpools), whether constructed specially for that purpose or converted from existing lanes.

(3) "CBD" is defined as the area bounded by Centre Street, Fallsway, Falls Avenue, Pratt Street, Greene Street, Franklin Street and Eutaw Street in Baltimore City.

(4) "Major street or highway" means any street or highway which meets the criteria given in paragraphs (b) (4) (ii) and (iii) of this section.

(b) The following provisions apply to all areas within the City of Baltimore and the counties of Baltimore, Howard, and Anne Arundel.

(1) The City of Baltimore and all municipalities in counties described above shall establish bus carpool lanes on the major streets and highways over which they have ownership or control according to the schedule in paragraph (b) (4) (v) of this section.

(2) Baltimore, Howard, and Anne Arundel counties shall establish bus/carpool lanes on the major streets and highways over which they have ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(3) The State of Maryland shall establish bus/carpool lanes on the major streets and highways over which it has ownership or control, according to the schedule in paragraph (b) (4) (v) of this section.

(4) Each of the governmental entities named in the previous three subparagraphs of this paragraph shall submit, no later than January 1, 1974, a detailed compliance schedule showing the steps which it will take to establish these bus/carpool lanes and to enforce the limitations on their use, with each schedule to include the following:

(i) Each street and highway which will have bus/carpool lanes must be identified with a schedule for the establishment of the lanes.

(ii) If a street or highway has four or more traffic lanes in one direction, at least one of these lanes must

be open only to buses (or buses and carpools) from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

(iii) If a street or highway has three lanes in one direction, at least one of these lanes must be open only to buses (or buses and carpools) from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m.

(iv) In unusual situations, a street or highway, or segment thereof, may be exempt from these requirements if an approval of the exemption is obtained from the Administrator. The application for exemption shall not be submitted and will not be accepted after November 15, 1973. Special circumstances justifying the need for an exemption (such as inappropriateness of use by buses, designation of bicycle lanes instead, or desire to allow bus/carpool lanes to be entered briefly by other vehicles for the purpose of crossing a lane or making a right turn) must be given in detail with the application.

(v) Bus/carpool lanes must be prominently indicated by overhead signs at least once every mile, and at each intersection or entry ramp. Of the lane mileage for each of the governmental entities, 25 percent must be established and needed signs must be installed by March 1, 1974; 50 percent by June 1, 1974; and 75 percent by September 1, 1974; and 100 percent by December 1, 1974.

(vi) Bus/carpool lanes must be prominently indicated by distinctive painted lines pylons, or physical barriers.

(vii) Between 7:00 a.m. and 6:30 p.m., the right two lanes of each one-way street in the CBD having four or more lanes shall be bus/carpool lanes.

(viii) Between 7:00 a.m. and 6:30 p.m., the right lanes of each one-way street in the CBD having three lanes shall be a bus/carpool lane.

(ix) In unusual situations, the requirements of paragraph (b) (4) (iv) of this section shall apply.

(5) Buses shall have the right-of-way whenever changing lanes on streets and highways with bus lanes. This shall take effect as each lane is established and identified.

(6) Buses shall be permitted to make left turns whether or not the intersection is posted for "No Left

Turn" (except when a one-way street would be entered from the wrong direction). This shall take effect January 1, 1974.

(7) None of the governmental entities named in paragraphs (b)(1), (b)(2) and (b)(3) of this section shall convert existing on-street parking spaces to traffic lanes unless the effect will be to increase the number of bus/carpool lanes on the affected street beyond the number otherwise required by paragraph (b) of this section or unless the effect will be to create a bicycle lane in place of the parking spaces. Exemptions from the requirements of this paragraph (b)(7) of this section may be sought by application in the manner and subject to the requirements provided for by paragraph (b)(4)(iv) of this section. Requests for exceptions pursuant to this subparagraph along streets or highways on which existing parking lanes will be automatically eliminated by the institution of parking limitations pursuant to § 52.1088 of this Chapter shall be submitted to the EPA no later than November 15, 1973. In all other cases, requests for exceptions must be made and approved before a parking lane can be converted to a traffic lane other than bicycle or bus/carpool lanes.

(8) A signed statement by the chief executive of each governmental entity or his designee shall be submitted to the EPA on January 1, 1974, to identify the sources and amount of funds for all projects.

(c) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. A State or other governmental entity will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

**§ 52.1090 Control of evaporative losses from the filling of vehicular tanks.**

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the Metropolitan Baltimore Intrastate Air Quality Control Region.

(c) A person shall not transfer gasoline to an automobile fuel tank from gasoline-dispensing systems unless the transfer is made through a fill nozzle designed to:

(1) Effect a vapor-tight fit between the fill nozzle and filler neck of the automotive fuel tank so as to prevent discharge of hydrocarbon vapors to the atmosphere.

(2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 90 percent by weight of the organic compounds in displaced vapors are recovered.

(3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.

(d) The system referred to in paragraph (c) of this section can consist of a vapor-tight vapor return line from the fill nozzle filler neck interface to the dispensing tank or to an adsorption, absorption, incineration, or refrigeration-condensation system or equivalent.

(e) Components of the systems required by § 52.1091 (c) can be used for compliance with paragraph (c) of this section.

(f) If demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of fill neck configuration, location, or other design features, the provisions of this paragraph shall not apply to tanks on vehicles existing at the time of promulgation of this regulation.

(g) The State of Maryland shall divide all facilities subject to this section into two classes, each of which taken as a whole emit approximately equal amounts of hydrocarbon materials. The classes shall be known as Class I and Class II.

(h) Except as provided in paragraph (j) of this section, the owner or operator of a source included in Class I shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1974.

(2) Initiation of onsite construction or installation of emission control equipment or process change must begin not later than July 31, 1974.

(3) Onsite construction or installation of emission control equipment or process modification must be completed not later than March 31, 1975.

(4) Final compliance is to be achieved not later than May 31, 1975.

(5) Any owner or operator of stationary sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(i) The owner or operator of a source included in Class II shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1975.

(2) Initiation of onsite construction or installation of emission control equipment or process change must begin not later than July 31, 1975.

(3) Onsite construction or installation of emission control equipment or process modification must be completed not later than March 31, 1976.

(4) Final compliance is to be achieved not later than May 31, 1976.

(5) Any owner or operator of stationary sources subject to the compliance schedule in this paragraph shall

certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(j) Paragraphs (h) and (i) of this section shall not apply:

(1) To a source which is presently in compliance with paragraph (c) of this section and which has certified such compliance with paragraph (c) of this section and which has certified such compliance to the Administrator by November 15, 1973. The Administrator may request whatever information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by November 15, 1973, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1975, in the case of Class I sources, and May 31, 1976, in the case of Class II sources. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.

(k) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (b) of this section fails to satisfy the requirements of § 51.15(b) and (c) of this Chapter.

#### § 52.1091 Gasoline transfer vapor control.

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the Metropolitan Baltimore Intrastate Air Quality Control Region.

(c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless such container is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the at-

mosphere of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location.

(1) The vapor recovery portion of the system shall include one or more of the following:

(i) A vapor-tight vapor return line from the storage container to the delivery vessel and a device that will ensure that the vapor return line is connected before gasoline can be transferred into the container.

(ii) Refrigeration-condensation system or equivalent designed to recover no less than 90 percent by weight of the organic compounds in the displaced vapor.

(2) The vapor-laden delivery vessel shall be subject to the following conditions:

(i) The delivery vessel must be so designed and maintained as to be vapor-tight at all times.

(ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with a vapor recovery system or the equivalent, which can recover at least 90 percent by weight of the organic compounds in the vapors displaced from the delivery vessel during refilling.

(d) The provisions of paragraph (c) of this section shall not apply to the transfer made to storage tanks equipped with floating roofs or their equivalent.

(e) *Compliance schedule.* Except as provided in paragraph (f) of this section, the owner or operator of any source subject to this section shall comply with this section on or before January 31, 1974.

(1) Any owner or operator in compliance with this section on the effective date of this regulation shall certify such compliance to the Administrator no later than 120 days following the effective date of this section.

(2) Any owner or operator who achieves compliance with this section after the effective date of this section shall certify such compliance to the Administrator within 5 days of the date compliance is achieved.

(f) Any owner or operator of a source subject to paragraph (e) of this section may, not later than 120 days following the effective date of this section, submit to the

Administrator for approval a proposed compliance schedule that demonstrates compliance with the provisions specified in paragraph (e) of this section as expeditiously as practicable but no later than June 30, 1975. The compliance schedule shall provide for increments of progress toward compliance. The dates for achievement of such increments of progress shall be specified. Increments of progress shall include, but not be limited to: submittal of final control plan to the Administrator; letting of necessary contracts for construction or process changes or issuance of orders for the purchase of component parts to accomplish emission control or process modification; initiation of onsite construction or installation of emission control equipment or process modification; completion of onsite construction or installation of emission control equipment or process modification; and final compliance.

(g) Any owner or operator who submits a compliance schedule pursuant to this paragraph shall, within 5 days after the deadline for each increment of progress, certify to the Administrator whether or not the required increment of the approved compliance schedule has been met.

#### § 52.1092 Oxidizing catalyst retrofit.

##### (a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of the vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbons and carbon monoxide from that vehicle.

(2) All other terms used in this section which are defined in 40 CFR Part 51, Appendix N, are used herein with the meanings so defined.

(b) This section is applicable in the Metropolitan Baltimore Intrastate Air Quality Control Region.

(c) The State of Maryland shall establish a retrofit program to ensure that on or before May 31, 1977, certain gasoline-powered light-duty motor vehicles of model years 1968 through 1975, which are or would be subject under presently existing legal requirements to regis-

tion in the area defined in paragraph (b) of this section, are equipped with an appropriate oxidizing catalyst retrofit device. No later than March 1, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use on motor vehicles subject to this section.

(2) Designation of an agency responsible for ensuring that the provisions of paragraph (c)(3) of this section are enforced.

(3) A provision that starting no later than May 31, 1976, the State of Maryland shall commence retrofitting oxidizing catalysts to those light-duty motor vehicles able to operate properly on unleaded 91 RON gasoline. The installation shall be completed by May 31, 1977.

(4) A method and proposed procedures for ensuring that those installing the retrofits have the training and ability to perform the known needed tasks satisfactorily and that they will have an adequate supply of retrofit components.

(d) After May 31, 1977, the State shall not register or allow to operate on public streets or highways any light-duty gasoline-powered vehicle which does not comply with the applicable standards, procedures, and regulations adopted pursuant to paragraph (c) of this section.

(e) After May 31, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle which does not comply with the applicable standards, procedures and regulations implementing this section.

(f) The State of Maryland shall submit, no later than January 1, 1974, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section and the text of needed statutory proposals and needed regulations which it will propose for adoption. The compliance schedule shall include a date by which the State shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1975.

(g) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. A State will be considered to have failed to comply with the requirements of this regulation if it fails to submit on time the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.1093 Vacuum spark advance disconnect.

(a) For purposes of this section, "vacuum spark advance disconnect" means a device or system installed on the vehicle which prevents the ignition vacuum advance from operating either when the vehicle's transmission is in the lower gears or when the vehicle is traveling below a predetermined speed.

(b) This section is applicable in the Metropolitan Baltimore Intrastate Air Quality Control Region.

(c) On or before January 1, 1975, all gasoline-powered light-duty vehicles of model year prior to 1968 and subject under presently existing legal requirements to registration in the area described in paragraph (b) of this section shall be equipped with an appropriate vacuum spark advance disconnect device.

(d) The State of Maryland shall submit, no later than January 1, 1974, a detailed compliance schedule showing the steps it will take to implement and enforce this requirement. Such schedule shall include, as a minimum, the following:

(1) A date by which the State will evaluate and approve devices for use in this program. Such date shall be not later than March 1, 1974.

(2) A date by which installation of this equipment shall commence. Such date shall be no later than June 1, 1974.

(3) A date by which all vehicles subject to this section will be equipped with such devices. Such date shall be no later than January 1, 1975.

(4) Designation of any agency or agencies responsible for evaluating and approving such devices for use on vehicles subject to this section.

(5) Designation of an agency or agencies responsible for ensuring that the prohibitions of paragraph (e)(2) of this section enforced.

(6) Method and proposed procedures for ensuring that those persons installing the devices have the training and ability to perform the needed tasks satisfactorily and that an adequate supply of devices will be available.

(7) Provision (apart from the requirements of any program for periodic inspection and maintenance of vehicles generally) for emission testing at the time of device installation or some other positive assurance that the device is installed and operating correctly.

(e) After January 1, 1975, the following shall apply within the Metropolitan Baltimore Intrastate Air Quality Control Region:

(1) The State shall not register a vehicle subject to this paragraph which is not equipped in accordance with paragraph (c) of this section.

(2) No owner of a light-duty vehicle subject to this paragraph shall operate or allow the operation of any such vehicle that is not equipped in accordance with paragraph (c) of this section.

(f) The failure of any person to comply with any provision of this section shall render such person in violation of a requirement of an applicable implementation plan, and subject to enforcement action under section 113 of the Clean Air Act. As to compliance schedules, a State will be considered to have failed to comply with the requirements of this regulation if it fails to submit on a timely basis the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.1094 Gasoline limitation.

##### (a) Definitions:

(1) "Base year" means the consecutive twelve month period commencing on July 1, 1972, and ending June 30, 1973.

(2) "Distributor" means any corporation, partnership, or sole proprietorship which transports or stores or causes the transportation or storage of gasoline between any refinery and any retail outlet.

(3) "Retail outlet" means any establishment at which gasoline is sold or offered for sale to the public or introduced into any vehicle.

(b) This section is applicable in the Metropolitan Baltimore Intrastate Air Quality Control Region to all distributors who transport gasoline to any retail outlet in this area, and to the owners of retail outlets in this area.

(c) Beginning July 1, 1974, the State of Maryland shall implement regulations limiting the total gallonage of gasoline delivered to retail outlets in the area described in paragraph (b) of this section to the amount delivered to such outlets during the base year. Beginning May 31, 1977, the State of Maryland shall implement regulations limiting the total gallonage delivered to retail outlets to that amount which, when combusted, will not result in the ambient air quality standard being exceeded. The State shall by January 1, 1977, submit to the Administrator regulations to accomplish this limitation and specifying the amount of limitation necessary.

(d) In order for the State to determine the amount of gasoline delivered during the base year and each year in which control is in effect, all distributors to which this section applies shall provide the State with a detailed accounting of the amount of gasoline delivered to each retail outlet in the areas described in paragraph (b) of this section during the base year, and the years during which control is in effect. For the year during which control is in effect, the owner of each retail outlet to which this paragraph applies shall provide the

State with a detailed accounting of gasoline received from each distributor, the total amount of gasoline sold during the year, and the amount of gasoline on hand at the beginning and the end of the year. The State may require any other reports it may deem necessary for the implementation of this section.

(e) The State of Maryland shall submit no later than January 1, 1974, a detailed compliance schedule showing steps it will take to establish and enforce the limitation program specified in paragraph (c) and (d) of this section including the next of needed statutory proposals and needed regulations which it will propose for adoption. Each schedule shall also include the following:

(1) A date by which the State shall adopt procedures to ensure that no more than the amount of gasoline specified in paragraph (c) of this section is delivered to retail outlets in the areas affected. Such date shall be no later than March 30, 1974.

(2) A date by which any report necessary for establishing such procedures shall be furnished to the State by the distributors. Such a date shall be no later than January 1, 1974.

(3) Any agency responsible for implementation and monitoring of this program.

(f) Failure to comply with any provision of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under Section 113 of the Clean Air Act. A state will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

[FR Doc. 73-15627 Filed 8-1-73; 8:45 am]

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[40 CFR Part 52]

**MARYLAND; (PRINCE GEORGES AND MONTGOMERY COUNTIES) APPROVAL AND PROMULGATION OF IMPLEMENTATION PLANS**

**Notice of Proposed Rule Making**

The transportation control plan submitted by the State of Maryland for attainment of the primary National Ambient Air Quality Standards for carbon monoxide (CO) and photochemical oxidants for the Maryland portion of the National Capital Interstate Region was disapproved in part on June 15, 1973, (38 FR 16558). This notice of proposed rulemaking sets forth regulations which in the Administrator's judgment could be implemented in addition to the approvable portions of the Maryland plan to attain and maintain the National standards for carbon monoxide and photochemical oxidants in the Maryland portion of the National Capital Interstate Region.

If revisions to the Maryland plan are submitted and determined to be approvable prior to Federal promulgation, these proposed regulations will be withdrawn. If revisions to the Maryland plan are submitted and determined to be approvable after Federal promulgation, then those Federal regulations will be rescinded. It is the desire of the Environmental Protection Agency that the plan to attain and maintain the carbon monoxide and photochemical oxidant standards in the Maryland portion of the National Capital Interstate Region by a Regional plan carried out by the State or its designated representative.

**TRANSPORTATION CONTROL ALTERNATIVES**

Analysis of the air quality problems in the National Capital Interstate Region, which contains Prince George's and Montgomery Counties in Maryland, reveals that both photochemical oxidants and carbon monoxide exhibit un-

acceptably high levels in the region, with the former being the pacing pollutant.

Since a substantial proportion of the photochemical oxidant problem and almost all of the carbon monoxide problem are the result of automotive vehicle emissions, measures to reduce emissions from individual vehicles and measures to reduce vehicular travel can be effective in improving air quality. Since a significant percentage of the oxidant-producing hydrocarbon emissions stem from the vehicle-related sources associated with gasoline handling operations, measures to reduce these operational losses can also provide a measurable improvement in the regional air quality.

Reductions in emissions from vehicles can be obtained through inspection and maintenance programs, and from incorporation of various retrofit devices. Reductions in Vehicle Miles Traveled (VMT) can be achieved through various pricing and taxing schemes for road use, adoption of parking restrictions, and/or limitations of available number of parking spaces, restrictions on idling or cruising of fleet vehicle, selective control of goods movement, the establishment of vehicle-free zones, establishment of a four-day week, programs promoting the use of carpools or alternative modes of transportation and limitations on gasoline usage. It must be emphasized that, in order to be effective, each VMT control measure proposed or adopted for the Region by the State of Maryland must be reflected by identical or equivalent measures in each of the neighboring jurisdictions of Virginia, and the District of Columbia.

In effecting substantial improvements in air quality, improvements in and expansion of public transportation facilities are a necessary and effective complement facilitating use of this alternative to the private automobile. Clearly public transit improvements must be implemented in concert with the appropriate level of vehicle restraints, as determined by the regional characteristics of the private automobile use demand elasticity. Such improvements as greater coverage, increased frequency of service, improved reliability, increased comfort and convenience, a reasonable cost, and adequate personal security will fur-

ther encourage the use of public transit alternatives to the private automobile.

#### SUMMARY

The Maryland plan, as amended by the June 15, 1973, June 22, 1973, and June 28, 1973, submissions in its demonstration of attainment of the photochemical oxidant and carbon monoxide air quality standards utilizes the following general measures. These are: the Federal Motor Vehicle Emission Control Program, a state-wide, state-run Motor Vehicle Inspection Program for all gasoline powered vehicles, improvements to public transportation, increased parking charges, bus/carpool locator, retrofit of heavy duty gasoline powered vehicles, restrictions on aircraft ground operations, and major stationary source restrictions. As aforementioned, it is EPA's intent to use the state submitted strategy to the greatest extent possible.

The Maryland plan reports that, in 1972, peak period hydrocarbon emissions were 30.1 tons (47.6 percent of the total Regional Peak emissions) and carbon monoxide emissions were 286,725 tons per year. Although these figures are only for Prince George's and Montgomery counties (i.e., the Maryland portion of the National Capital AQCR), they are reflected in the overall strategy developed by the Metropolitan Washington Council of Government (COG). The state of Maryland's corrected calculations indicate that hydrocarbon emissions in Maryland in the peak period must be reduced by 65 percent of the 1972 emissions to a level of 10.5 tons. Similarly, carbon monoxide emissions must be reduced by 55 percent of the 1972 levels to an annual level of 129,026 tons.

After including projected increases in vehicle miles of travel, the Federal Motor Vehicle Control Program will reduce hydrocarbon peak period emissions by 15.1 tons or by approximately 50 percent relative to the 1972 base period. Similarly, the impact on carbon monoxide levels will be to reduce emissions in Maryland by 145,000 tons yearly or by 51 percent relative to the 1972 base period.

These estimates are adjusted to reflect the effect of the 1975 interim motor vehicle emission standards announced on April 11, 1973.

Since the 21-day period for public comment on the additional submissions has not been completed, it is impossible for the Administrator to make a final decision on approval or disapproval of the strategies included in the Maryland plan at this time. This decision must take into consideration all comments received during this time. However, preliminary review by EPA indicates that certain strategies are likely to be approvable. Accordingly, the Agency is proposing only those items which, when added to the approvable measures, are necessary to attain the National Ambient Air Quality Standards.

If an apparently approvable strategy is determined not to be approvable, additional measures will be proposed.

The information contained in the additional submissions by the State appears to remedy many of the deficiencies on which the Administrator's June 15 decision was based.

The following is a summary of the actions EPA is proposing to take with respect to the Maryland Plan.

*Federal Motor Vehicle Control Program*—Reductions appear to be approvable based on projected vehicle populations and emission factors.

*Motor Vehicle Inspection Program*—The basic program appears to be approvable in concept but lack of legal authority delays timely implementation of the plan. Therefore, it does not appear to be approvable. The Administrator will propose the same program, but with an acceptable implementation schedule.

#### *Improvements in Public Transit*

(a) Maryland participation in the area wide addition of 750 buses to current fleet—appears to be approvable, contingent upon clarification of certain administrative details.

(b) Exclusive Bus Lanes—appears to be approvable.

(c) System Improvements (i.e., shelters, fringe parking, improved scheduling) appears to be approvable.

#### *Increased Terminal Charges*

(a) Elimination of free off-street, employee parking in certain areas—does not appear to be approvable.

(b) Street enforcement of current on-street parking restrictions—appears to be approvable.

(c) \$2.00 parking surcharge (or an equivalent measure)—appears to be approvable.

*Bus/Carpool Locator Program*—appears to be approvable.

*Restrictions on aircraft ground operations*—partial reductions are allowable; appears to be partially approvable.

*Increased Control of Stationary Source Emissions*—not approvable at this time due to lack of adopted regulations.

*Heavy Duty Restraints*—does not appear to be approvable because of lack of documented technical feasibility.

Due to the fact that:

Full reductions claimed for aircraft emissions do not appear to be allowable;

The plan did not include adequate controls for heavy duty gasoline powered vehicles.

The portion of the plan dealing with elimination of free off-street employee parking does not appear to be approvable.

The controls over stationary sources cannot be approved at this time.

EPA is proposing the following measures:

Initiation of commercial-type parking rates or reduction of 12% the available spaces at any federal, state, or local facility which has 25 or more parking spaces and which is located in a high density employment area which is well serviced by public transit.

Retrofit by 1975 of all pre-1968 vehicles with a vacuum spark advance disconnect kit.

Retrofit of light duty 1971-1975 fleet vehicles (including federal government vehicles) and taxicabs with an oxidizing catalyst retrofit—beginning in mid-1976, to be completed by mid-1977.

Controls of emissions of hydrocarbons due to gasoline handling; both from the delivery truck to underground tank and from the pump to the vehicle. Implementation begins in 1974 and is fully completed by 1977.

Ban of heavy-duty-gasoline-powered vehicles (except emergency vehicles, mail trucks, etc.) from 6:00 a.m. to 9:30 a.m. beginning July 1, 1974.

Finally, since the \$2.00 surcharge proposed by Maryland is integral to the success of this plan, EPA is proposing contingency strategies to be implemented if appropriate steps are not taken to implement the surcharge. These contingency measures are:

A ban on the construction, modification or enlargement of any parking facility without having first obtained a permit from the Administrator.

A phased 15 percent reduction in the number of off-street parking spaces.

The Administrator invites comments on these and any other measures which may be used to achieve the national ambient air quality standards for photochemical oxidants and carbon monoxide.

#### TWO-YEAR EXTENSIONS TO ACHIEVE STANDARDS

The Administrator proposes to give a two-year extension for the attainment of the standard in the State of Maryland. To attain the standards in 1975 would require stringent restraints on vehicle miles traveled which could not be considered to be "reasonably available" within the meaning of section 110(e) of the Clean Air Act, or the implementation of a widespread catalytic retrofit program which could not be implemented due to technological problems before 1977. Although some measures have not been proposed here which have appeared in some other proposals (such as gasoline limitations and a selective vehicle exclusion program involving colored tags) the reduction in vehicle miles traveled expected from meas-

ures contained herein appears to be substantial and adequate to fulfill the requirement that reasonably available alternative measures be employed before an extension is given for any strategy. The plan proposed herein, along with the apparently approvable measures submitted by the State of Maryland, apply the reasonably available alternative means of control at the earliest possible dates. Comment is invited on any measures which have not been considered and applied and which can be considered to be reasonably available.

#### SUMMARY OF EFFECTS

The following table is a summary of the effect of the proposed strategies on the total reductions required.

COMPILED OF CONTROL STRATEGY EFFECTS FOR THE NATIONAL CAPITAL INTERSTATE REGION ON MAY 31, 1977

	Stationary Source	Emissions	Without Control	Carbon Monoxide		Hydrocarbons	
				Tons per peak period	Percent of total Reduction Required	Tons per peak period	Percent of total Reduction Required
Expect Reduction From:			78			14.3	
(a) Dry Cleaning Vapor Recovery			0	0	1.1	8.7	
(b) Gasoline Handling Vapor Recovery			0	0	5.0	39.4	
(c) Other Stationary Source Rule Strengthening			0	0	0		
Stationary Emissions Remaining			78			8.2	
Mobile Emissions from Highway Light and Heavy Duty Vehicle without Control Strategy			498			19.3	
Expected Reductions From:							
(a) Inspection and Maintenance			26	34.6	1.5	11.8	
(b) VSAD Retrofit, pre-'68 cars			3	4.0	0.4	3.2	
(c) Catalytic Retrofit of Fleet LDV's			5	6.7	0.2	1.6	
(d) Mass Transit Improvements			21	28	2.7	21.2	
(e) HDV Peak Hour Delivery Ban			27	36	1.0	7.6	
(f) Aircraft Model Program			11.0	14.6	0.8	6.4	
Mobile Emissions Remaining			405			12.7	
Total Emissions without Strategy			576			33.6	
Total Reductions			93	123.9	12.7	100.2	
Total Emissions Remaining			483			20.9	

#### PROPOSED CONTROLS ON STATIONARY SOURCES

One of the major sources of hydrocarbon emissions, which have been identified in the Maryland plan for the Maryland portion of the National Capital Interstate Region, is the gas handling losses which occur in the dis-

tribution system for gasoline fuel. The Maryland plan proposes control of these emissions.

The regulations proposed by the State of Maryland for control of hydrocarbon emissions at retail service stations or fleet-owned service stations requires installation of a vapor balance line or equally effective vapor discharge control system. This regulation requires controls to be installed on all stations with a monthly average throughput exceeding 35,000 gallons by May 31, 1975, and at all other stations by May 31, 1977. Vapor collecting systems which must be installed on vehicle fuel tank filling systems are to be installed concurrent with the vapor balance line connections specified above.

The regulations as proposed by the State of Maryland appear to be adequate to achieve the anticipated reduction in hydrocarbon emissions. However, the Administrator cannot approve these proposed regulations at this time, since 40 CFR part 51 requires that all regulations dealing with the control of stationary sources be adopted at the time of submittal of the plan. EPA is therefore proposing to promulgate similar regulations which will be rescinded upon submission of equivalent acceptable regulations as adopted by the State of Maryland.

Existing organic solvent regulations require that all present dry cleaning installations emitting more than 200 pounds per day of photochemically reactive hydrocarbons shall reduce present emissions by at least 85 percent, and that the limit for new installations shall be 40 pounds per day. In its plan the state has proposed a requirement that all dry cleaning establishments refrain from using any photochemically reactive organic solvents after May 31, 1974. This would result in a reduction of 0.03 tons per peak period, or 0.14 percent of the reduction required to meet the primary ambient air quality standards by May 31, 1977. The Administrator is aware of Maryland's on-going program for the control of hydrocarbon emissions from dry cleaning installations and is presently evaluating the proposed regulation which would accelerate the program by attaining full compliance by the proposed May 31, 1974 date.

The regulations as proposed by the State of Maryland appear to be adequate to achieve the anticipated reduction in hydrocarbon emissions. However, the Administrator cannot approve these proposed regulations at this time, since 40 CFR part 51 requires that all regulations dealing with the control of Stationary Sources be adopted at the time of submittal of the plan. EPA is therefore proposing to promulgate similar regulations which will be rescinded upon submission of equivalent acceptable regulations as adopted by the State of Maryland.

The Environmental Protection Agency has also examined Maryland's regulations governing emissions of organic solvents resulting from degreasing operations and from evaporation from surface and architectural coatings. For degreasing operations, there are no specific constraints on non-reactive material that may be used such as perchlorethylene or saturated halogenated hydrocarbons that are in use elsewhere. Comments are solicited on whether degreasing operations in the Maryland portion of the National Capital Interstate Region are a significant source of reactive hydrocarbon emissions for which a specific regulation should be promulgated.

Emissions of other solvents in the Maryland portion of the National Capital Interstate Region were also investigated. It has been determined that technology does exist to control more efficiently the emissions of a number of the smaller heating (15 to 200 lb per day category) and spraying operations (in the 40 to 200 lb per day category) involving organic solvents. Their estimated total peak period emissions is 0.10 tons or 0.47 percent of the reduction required to meet the primary ambient air quality standards by May 31, 1977. Comments are solicited as to whether it is feasible or practicable to require additional controls on these sources, many of which are presumably located on the premises of small sized firms. If these comments indicate that further controls are needed, then the Administrator proposes to promulgate regulations equivalent to those currently adopted by the County of Los Angeles Air Pollution Control District as Rule 66. L.A. Rule 66 contains minor exemptions involv-

ing evaporative emissions from gallon (or smaller) sized containers of architectural coating compounds, and from the allowable disposal limits of waste solvent materials. There are no data presently available to the Administrator on the atmospheric burden that may be created by such evaporative emissions though they are presently believed to be very small.

PROPOSED CONTROLS ON MOBILE SOURCES  
(NON-AIRCRAFT)

In the plan addendum of June 28, 1973, it is stated that legislative authorization funding measures, etc., are needed to implement Maryland's proposed inspection and maintenance program. The tentative implementation timetable proposed by Maryland shows the commencing of the 20-month program on January 1, 1975, following an assumed passage of legislation, and completion by September 1, 1976. Under the requirement of the Clean Air Act, the States must proceed as expeditiously as practicable to attain primary air quality standards. Because of the delay in getting legal authority, Maryland's program would not be implemented as expeditiously as possible. In an effort to ensure the earliest possible initiation of Maryland's program, the Administrator is proposing a regulation which will permit implementation of the system to begin on March 1, 1974, and permit actual commencement of the inspection program by August 1, 1975.

The Maryland plan proposes an emissions inspection program for all light and heavy duty gasoline powered vehicles with an initial failure rate of 30 percent. As recommended in Appendix [sic] N of 40 CFR, Part 51, a 12 percent hydrocarbon emission reduction and a 10 percent carbon monoxide emission reduction for all such vehicles is claimed through the use of a loaded test inspection/maintenance program. Comments are solicited on the desirability to establish an initial 50 percent failure rate criterion which calculations indicate would result in an

additional reduction of 0.1 tons hydrocarbon peak period emission.

A full EPA review of the June 28, 1973, addendum is now in progress. This review will determine the degree of acceptability for both the establishment of the inspection and maintenance system itself and the subsequent inspection program. Comments are also solicited from the public and other interested parties on all aspects of the program. It is the Administrator's intent that the final promulgation incorporate as much of the Maryland proposed program as can be found acceptable.

Since the Clean Air Act requires consideration of all reasonably available alternatives, in order to attain the primary standard as expeditiously as practicable, EPA proposes retrofit of pre-1968 light duty vehicles with approved Vacuum Spark Advance Disconnect (VSAD) devices and 1971-1975 light duty fleet vehicles with oxidizing catalyst devices. The VSAD device is expected to reduce hydrocarbon emissions by 25 percent per vehicle and carbon monoxide emissions by 9 percent per vehicle. The oxidizing catalyst device is expected to reduce both hydrocarbon and carbon monoxide emissions by 50 percent per vehicle. Only those cars of 1971-1975 model years which run on gasoline with a R.O.N. of 91 can be fitted with this device because of technical constraints. In addition this gasoline must be unleaded. National estimates indicate that approximately 75 percent of the 1971-1975 model year vehicles would be retrofitted under this proposal. Since catalytic retrofit devices for light-duty vehicles are expected to be available by 1977, it is proposed to require installation of these devices on all 1971-1975 LDV fleet vehicles (e.g., taxis, GSA vehicles, rental cars, fleet delivery vehicles), capable of operating on 91 RON gasoline.

The regulation proposed by the Administrator will require that the above motor vehicles be equipped with catalytic retrofit devices by May 31, 1977, effecting a 50 percent hydrocarbon emission reduction for each vehicle. Exemptions will be allowed for all 1975 vehicles originally equipped with the oxidation catalytic converter

or those vehicles which are certified to meet the original statutory emission standards in 1975. Based on inspection currently available to him, the Administrator estimates that fleet vehicles account for 6 percent of total mobile source emissions. On the basis that one-third of the fleet vehicles will be older than two years (pre 1976), and catalytic retrofits can reduce automotive emissions from each vehicle by 50 percent, it is apparent that this measure, when applied on a Region-wide basis, will result in a hydrocarbon emission reduction of 0.2 tons/peak period.

In the event that the measures proposed herein prove to be inadequate, the Administrator is required by law to apply additional reasonably available alternatives, including catalytic retrofit of other segments of 1968-1975 light duty vehicle population. Candidate segments include all light duty trucks, all GSA cars, or passenger vehicles of specified model years. The public is urged to present their comments on these or any other type of control measure that may help to achieve the National Ambient Air Quality Standards.

#### PROPOSED REDUCTIONS IN VMT

According to data provided by the Metropolitan Washington Council of Governments, the proposed transportation package (including 750 additional buses, exclusive bus/carpool lanes, a carpool locator service, and parking restrictions) will result in a 12 percent reduction in 6-9 am VMT and a corresponding reduction in total trips.

The Maryland plan includes the following strategies under its transportation measures:

1. Participation with District of Columbia and Commonwealth of Virginia in an area wide improved transit system, including the addition of 750 buses to the current area fleet, the establishment of exclusive bus lanes, bus shelters, and fringe parking facilities.

2. Increased terminal costs including the elimination of free parking and the establishment of a \$2.00 parking

surcharge for long term commuter parking in all areas adequately served by mass transit.

3. Establishment of a computerized carpool locator service.

This portion of the plan is central to the Maryland plan for reduction of HC and CO emissions. Therefore, to avoid confusion and expedite comments, a discussion of the elements that make up this portion of the plan shall be included.

a. *Elimination of Free Parking*—The State of Maryland proposes to have EPA eliminate free parking for the federal government employees, and to study the feasibility for similar action by the state for employees of state and local government and private businesses. The plan also includes a program of strict enforcement of existing parking regulations.

These measures will be imposed in high density employment areas which are adequately served by mass transit. These areas will be more specifically described by the state within the next 10 months, upon completion of studies of the matter.

Additionally, Maryland proposes to enter into a reciprocal enforcement program for parking violations. Thus, enforcement of the existing parking regulations will be facilitated.

On the basis of the information submitted by Maryland in its plan, the Administrator feels that the portions of the Maryland plan dealing with enforcement of existing parking restrictions and the reciprocal enforcement of parking violations is approvable.

As pointed out in Maryland's plan, reduction of emissions due to work trips within the Maryland portion of the AQCR by Federal Government employees is integral to achieving air quality goals. Therefore, EPA feels it has the responsibility to aid Maryland in the control of these emissions. As a result, EPA will follow the suggestion made in the Maryland plan and propose a federal regulation which would effectively reduce emissions as a result of commuter trips by federal employees. This will be done by requiring federal facilities in high density areas

served by mass transit to either eliminate free parking (by establishing commercial type rates) or to reduce the available parking spaces in these facilities by 12 percent.

Since the other jurisdictions in the AQCR has also proposed to eliminate free parking for employees of their government and the Maryland plan is unclear on this point, EPA is also proposing that the specific state and local governmental parking facilities eliminate free parking (or adopt an equivalent measure). Specifically the proposal calls for the elimination of free parking or the reduction of available space by 12 percent for all state and local government parking facilities which have 25 or more spaces and which are located in high density employment areas which are served by public transportation. Since the plan is regional in nature, this action is necessary to insure that the reductions achievable by this measure throughout the AQCR do in fact occur. The Administrator feels that the result of this proposal will be to induce employees to utilize alternate modes of transportation, such as buses and car pools and thereby reduce the VMT in the area. It should be noted that this proposal should result in a reduction of VMT over the entire area because it will reduce VMT of employees from all three jurisdictions in the National Capital Area.

The Friendship Heights Area, the Silver Spring Area, and the Rockville Area, along with other areas, in all likelihood would need to be included in any definition of "high density employment area which is served by mass transit" for this strategy to be effective.

*b. \$2.00 Surcharge (or its equivalent)*

The Maryland plan proposes to seek the imposition of a \$2.00 per day surcharge (or an equivalent measure) on all long term parking facilities in employment areas which are served by mass transit. Identification of the areas where the surcharge is to be imposed should be made within the next 10 months, upon completion of studies of matter.

This proposal calls for the charge to be implemented and enforced by the local jurisdictions within the Maryland portion of the AQCR. The Administrator feels that,

if implemented according to the schedule provided in the plan, this proposal is approvable.

It is well documented that no matter how well designed and operated a mass transit system is, unless there are disincentives to the use of the private automobile, mass transit will be ineffective. Therefore, Maryland's proposals for the surcharge is integral to the success of the plan.

The Administrator wants to make it clear that if for any reason this strategy is not implemented according to schedule, he will institute equivalent measures. In order to avoid any delay in the implementation of such equivalent measures and to invite timely public comment, the Administrator is proposing contingency measures in the plan. These contingency measures will become effective if it becomes apparent that the surcharge will not be implemented. Specifically, a phased 15 percent reduction in existing off-street parking spaces would be imposed, as well as a ban on the construction, modification or enlargement of any parking facility without first obtaining a permit from the Administrator. Public comments are solicited on these contingency proposals.

*c. Mass Transit Improvements.* The development of an effective mass transit system is essential to the development of an effective transportation control strategy. If this control plan is to be successful, a sufficient number of buses with convenient service and adequate schedules must be provided.

The Maryland plan proposes to participate in the area wide transit system increase of current fleet size by 750 buses and to improve service and convenience for commuters. Included in this proposal are provisions for installing bus shelters, providing additional public information and improved scheduling. In addition, Maryland plans to institute a number of exclusive bus lanes on major highway corridors. All of these measures are meant to provide the increased mass transit service which will be necessary if air quality standards are to be achieved.

Based on the information contained in the documents submitted by Maryland, the Administrator feels that the

proposals for increased mass transit are approvable, on the condition that certain administrative details will be provided to him by the State. Specifically, the arrangements or agreements which will trigger the expansion of the fleet should be clarified, since it is necessary for EPA to determine what actions are necessary to bring about any additional purchases of buses. Also a clarification on the schedule showing the projected incremental increases in fleet size should be provided. In addition, the Maryland plan does not specifically indicate that Maryland will expend funds for the necessary purchase of new buses. Since Maryland is a signator of the WMATA compact, this commitment can be assumed. A direct declaration by Maryland should be made, though.

d. *Bus/Car Pool Locator System.* The Maryland plan recognizes the need for more efficient utilization of current automobile usage. Thus, the plan proposes a voluntary bus/car pool locator matching service. This system will attempt to assemble lists of commuters with similar work schedules and home, work locations, and will be phased in starting with pilot projects during 1973. Full operation of the system is scheduled for April 1974. The Administrator feels that this measure is approvable, and encourages residents of the National Capital area to take advantage of this service.

Along with the benefits accruing to this system in terms of a potential decrease of vehicle miles traveled, this system also has the advantages of fuel conservation and it will mitigate the impact of disincentives to private auto use (i.e., the surcharge and elimination of free employee parking).

e. *Heavy duty vehicle restraints.* In addition to the transportation measures described above, the Maryland plan addresses the problem of heavy duty gasoline powered vehicle emissions. The plan discusses emission control retrofit program for heavy duty gasoline powered vehicles. The discussion provided indicates the need to achieve a 50 percent reduction in emissions from such vehicles to meet the standards by 1977. Such reduction would be complimentary to the approvable heavy duty

emission controls measures included in the District of Columbia plan and the concepts discussed in the Virginia plan.

The Maryland plan specifically proposes a heavy duty retrofit strategy to be implemented by 1977. Currently, EPA feels there are many uncertainties concerning the feasibility of implementing such a strategy by 1977. The only significant development and testing program currently on-going is being conducted by the state of New York. EPA feels this program has the potential to develop and provide information for the implementation of a heavy duty retrofit program by 1977. Accordingly, the Agency has approved this strategy for the New York plan.

While Maryland's heavy duty retrofit proposal appears to be basically approvable, EPA does not feel the plan provides adequate assurance that Maryland will develop a program of their own for the development and testing of such devices or indicate a commitment to establish an understanding to use information developed through New York's program. Without this information, EPA does not feel this strategy is approvable at this time. Furthermore, even if this program was approvable, the Administrator believes emission reductions from heavy duty vehicles can be reduced at an earlier date through heavy duty vehicle delivery bans.

In light of this determination and in order to compliment similar measures in the District of Columbia and Virginia plans, the Administrator is proposing a delivery ban on heavy duty gasoline powered vehicles which will be effective during the peak traffic period (6:00 am-9:30 am). The ban will take effect July 1, 1974. The Administrator recognizes that the District of Columbia will impose this ban on January 1, 1974; however, in order to allow Maryland adequate time to adopt regulations and plans for implementation of this ban, the additional implementation time is warranted.

EPA encourages the State of Maryland to submit the required additional information on the heavy duty retrofit program. Such a program could eventually replace the proposed interim delivery ban.

### AIRCRAFT EMISSION REDUCTION

Aircraft emissions, as they affect ambient air quality, occur during approach, landing, taxi, idle, takeoff, and climbout. Heaviest emissions occur during taxi and idle when aircraft engines are operated at greatly reduced power.

The Maryland Transportation Control Plan asserts that control of these emissions through modified ground operations at Dulles and Washington National Airports can result in a significant hydrocarbon, and carbon monoxide emission reduction in the National Capital Region. Maryland contends that a 50% reduction in hydrocarbon and carbon monoxide emissions can be achieved through the implementation of such ground controls at the two northern Virginia airports. Such a reduction would represent a 1.7 ton reduction in the area's hydrocarbon emissions and a 28 ton reduction in the area's carbon monoxide emission. Maryland assumes the required measures will be fully implemented by EPA and FAA during the next four years and takes full credit for the potential emissions reductions which they believe could result from these measures.

The assumed reduction in hydrocarbon emissions is necessary for the plan to demonstrate achievement of the oxidant standards; the claimed carbon monoxide reductions are not needed for attainment of the standard.

EPA has published an Advance Notice of Proposed Rulemaking for aircraft ground controls but has not yet proposed regulations for such controls. The Agency, however, is currently funding a demonstration project with FAA to determine if safety hazards would accompany modified ground operations. If the demonstration is successful, EPA will propose and promulgate regulations for the implementation of ground operations deemed free of safety hazards.

The Agency currently believes that certain ground and taxi operations included in the demonstration can be conservatively assumed to be safe and acceptable. EPA calculations indicate that the application of these meas-

ures could result in a 24 percent reduction in hydrocarbons at National Airport and a 30 percent reduction in hydrocarbons at Dulles Airport vice (50 percent reduction proposed by Virginia). In light of EPA's intention to work jointly with FAA to promulgate and implement ground operations deemed safe and acceptable prior to 1977, the Agency believes it is reasonable to allow Maryland to accept credit for emission reductions which will result from controlling the ground operations conservatively felt at this time to be safe and acceptable. The percent emissions reductions indicated above which would result from these measures would provide approximately a 0.8 tons reduction in hydrocarbons for the National Capital Region. Accordingly, the Agency will accept 0.8 tons of the claimed 1.7 tons reduction as being an approvable portion of the plan based on the expected implementation of ground operation regulations.

### ECONOMIC AND SOCIAL IMPACT

The social and economic consequences of the measures included in the Maryland plan or proposed herein are considered reasonable. For example, the inspection and maintenance procedures will require expenses of approximately \$10 annually for the average vehicle inspected. The implementation of the VSAD retrofit program of pre-1968 vehicles will require that individual motorists pay approximately \$20 installation costs. Though the price to the fleet vehicle owner for the catalytic retrofit is \$135 per vehicle, this cost could gradually be reclaimed through slightly higher service or use fees for the fleet vehicles controlled. In addition, such expenditure can be deducted from income tax as a business expense, and therefore part of the cost will be absorbed by the government. Compensation for the expenditures associated with the modifications required by the gasoline handling regulations could similarly be gained through slight increase in the fees for station services or fuel prices. This also could be deducted as a business expense from the income tax. Distributed costs of the various mass transportation improvement measures, as well as the incentives

for the use of express buses and carpools and disincentives on the use of automobiles by individual motorists-commuters, are also considered reasonable.

The measures providing transportation improvements are expected to benefit the public from the standpoint of improved traffic flow for commuters, general urban mobility, and energy consumption. The resulting VMT reductions may also have some impact on the sprawling development patterns fostered by widespread automobile use which are unduly wasteful of energy, land and other resources and have contributed to the decay of urban centers.

#### PUBLIC COMMENTS SOLICITED

Although the Administrator has concluded that the proposed plan is the best approach available to him at the present time for achieving compliance with the requirements of the Act, further analysis may demonstrate that more appropriate options are available. He therefore desires to obtain the comments and suggestions of the public on the problems of achieving the ambient air quality standards in the Maryland portion of the National Capital Interstate Air Quality Control Region. Comments are particularly invited pertaining to measures that may be taken by Federal, State, or local authorities to support or supplement the proposed air pollution control strategy, to implement these measures, and to compare social and economic effects of alternative pollution control measures.

Public hearings will be held at the Holiday Inn, 8777 Georgia Ave., Silver Spring, Maryland on September 6, 1973, beginning at 9:00 a.m. Notice of the hearings on these regulations (including designation of locations for inspection and distribution of EPA proposals) is being published in the Maryland portion of the National Capital Interstate Air Quality Control Region.

The Administrator's final promulgation of transportation controls for the Maryland portion of the National Capital Interstate Region will consider the comments and testimony he receives, as well as any additional approv-

able strategies submitted by the State as part of the State plan before or at the hearings. These influences, and the additional analysis of alternative strategies that can be made in the time between this proposal and final promulgation, may lead the Administrator to adopt final regulations that differ in important ways from this proposal.

#### SUBMITTAL OF WRITTEN COMMENTS

Interested persons may participate in this rule making by submitting written comments, preferably in triplicate, to the Mobile Source Enforcement Division, EPA, 401 M Street, SW., Washington, D.C. 20460. All relevant comments received on or before September 4, 1973 will be considered. Receipt of comments will be acknowledged, but substantive responses to individual comments will not be provided. Comments received will be available for public inspection during normal business hours at the office of Public Affairs, EPA, 401 M Street, SW., Washington, D.C. 20460. This notice of proposed rule making is issued under the authority of Section 110(c) and 301(a) of the Clean Air Act. (42 U.S.C. 1857 et seq.)

#### EPA STUDIES AND GUIDELINES

Further information on transportation control, land use, and motor vehicle emissions may be obtained from one or more of the following documents which the Environmental Protection Agency has published:

a. "Prediction of The Effects of Transportation Controls on Air Quality in Major Metropolitan Areas" and "Evaluating Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas," November 1972. Both of these documents are generally known as the "Six Cities Study".

b. "Transportation Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas", December 1972. This document is a summary of a study of 14 cities conducted with the view of recommending specific trans-

portation control strategies. (Separate reports for each of the 14 cities are also available.)

NOTE: The documents listed in a and b above are available from the Air Pollution Technical Information Center, EPA, Research Triangle Park, North Carolina 27711.

c. "Control Strategies for In-Use Vehicles", November 1972. This report is available from EPA, Mobile Source Pollution Control Programs, 401 M Street, SW., Washington, D.C. 20460.

d. "Transportation Control Measures", FEDERAL REGISTER (38 FR 15194) June 8, 1973.

e. "Aircraft and Aircraft Engines", FEDERAL REGISTER (37 FR 26488) December 12, 1972.

f. "Aircraft Emissions: Impact on Air Quality and Feasibility of Control." This report presents the available information on the present and predicted nature and extent of air pollution related to aircraft operations in the United States. In addition, it presents an investigation of the present and future technological feasibility of controlling such emissions. (42 U.S.C. 1857 et seq.)

Dated: July 24, 1973.

ROBERT W. FRI,  
*Acting Administrator.*

It is proposed to amend Part 52 of Chapter I of Title 40 of the Code of Federal Regulations by adding the following:

#### Subpart V—Maryland

##### § 52.1095 Inspection and maintenance.

###### (a) Definitions:

(1) "Inspections and maintenance program" means a program to reduce emissions from in-use vehicles by identifying vehicles which need emission-control-related maintenance and requiring that maintenance be performed.

(2) "Precontrolled vehicles" means light duty vehicles sold nationally (except California) prior to the 1968 model year and light duty vehicles sold in California prior to the 1966 model year.

(3) "Controlled vehicles" means light duty vehicles sold nationally (except California) in the 1968 model year and later light duty vehicles sold in California in the 1966 model year and later.

(4) "Loaded emissions test" means a sampling procedure for exhaust emissions which requires testing the engine under stress (i.e., loading) by use of a chassis dynamometer to simulate actual driving conditions. As a minimum requirement, the loaded emission test must include running the vehicle and measuring exhaust emissions at two speeds and loads other than idle.

(5) "Idle emission test" means a sampling procedure for exhaust emission which requires operation of the engine in the idle mode only. At a minimum, the idle test must consist of the following procedures carried out on a fully warmed-up engine: A verification [sic] that the idle RPM is within manufacturer's specified limits and a measurement of the exhaust carbon monoxide and/or hydrocarbon concentrations during the period of time from 15 to 25 seconds after the engine was used to move the car or was run at 2000 to 2500 RPM with no load for 2 to 3 seconds.

(6) "Retrofit" means the addition or removal of an item of equipment, or a required adjustment, connection, or disconnection of an existing item of equipment, for the purpose of reducing emissions.

(7) "Idle adjustment" means a series of adjustments which include RPM, idle air/fuel ratio and basic timing.

(8) "Initial failure rate" means the percentage of vehicles rejected because of excessive emissions of a single pollutant during the first inspection cycle of an inspection/maintenance program. (If inspection is conducted for more than one pollutant, the total failure rate may be higher than the failure rates for each single pollutant.)

(b) This regulation is applicable within the Maryland portion of the National Capital Interstate Air Quality Control Region.

(c) The State of Maryland shall submit to the Administrator of EPA or his designee, no later than January 1, 1974, a detailed compliance schedule showing the steps that will be taken to establish and enforce an inspection and maintenance program pursuant to paragraph (d) of this section. The compliance schedule shall include:

(1) The text of any necessary statutory proposal and regulations that are needed to carry out the inspection/maintenance system.

(2) A detailed timetable describing the steps that must be taken and when these steps will be taken to ensure the timely submittal of the needed legislation to the legislature and to ensure timely adoption of the regulations needed for paragraph (d) of this section.

(3) A detailed timetable describing the dates of ordering and of acquisition of necessary equipment.

(4) A signed statement by the chief executive or his designee identifying the sources and amounts of funding for the inspection/maintenance program and a timetable to ensure that proper funding levels are available. If funds cannot legally be obligated under existing statutory authority, the text of the needed legislation shall be submitted to the Administrator of the Environmental Protection Agency or his designee pursuant to paragraph (c) (1) of this section.

(d) The State of Maryland shall establish an inspection and maintenance program applicable to all light duty gasoline-powered vehicles registered within its confines. No later than March 1, 1974, the State of Maryland shall submit to the Environmental Protection Agency legally adopted regulations reestablishing such a program. The regulations shall include:

(1) Provisions for the inspection of all gasoline-powered light duty vehicles at periodic intervals of no

more than one year by means of a loaded (dynamometer) test.

(2) Provisions for inspection failure criteria consistent with the emission reduction claimed in the plan for the strategy. These criteria shall include an initial failure rate of 30 percent (see definitions).

(3) Provisions to ensure that failed vehicles receive the maintenance necessary to achieve compliance with the inspection standards. This shall include sanctions against individual owners and repair facilities, retest of failed vehicles following maintenance, a certification program to ensure that repair facilities performing the required maintenance have the necessary equipment, parts and knowledge to perform the tasks satisfactorily, and such other measures as may be necessary or appropriate.

(4) A program of enforcement to ensure that vehicles are not intentionally readjusted or modified subsequent to the inspection and/or maintenance in such a way as would cause them to no longer comply with the inspection standards. This might include spot checks of idle adjustments and/or a suitable type of physical tagging.

(5) Delineation of the agency or agencies responsible for conducting, overseeing and enforcing the inspection and maintenance program.

(6) Provisions for beginning the first inspection cycle by August 1, 1975, and completing it by July 31, 1976.

(e) After July 31, 1976, the State of Maryland shall not register nor allow to operate on its streets or highways vehicles which fall within this regulation and have not complied with the applicable standards and procedures of paragraph (d) of this section. This shall not apply to the initial registration of a new motor vehicle.

(f) After July 31, 1976, no owner of a vehicle which is affected by this regulation shall operate or allow to be operated a vehicle which does not comply with the applicable standards and procedures of paragraph (d) of this section. This shall not apply to the initial registration of a new motor vehicle.

**§ 52.1097 Vacuum Spark Advance Disconnect.**

(a) For purposes of this section, "vacuum spark advance disconnect" means a device or system installed on the vehicle which prevents the ignition vacuum advance from operating either when the vehicle's transmission is in the lower gears or when the vehicle is traveling below a predetermined speed.

(b) This section is applicable in the State of Maryland portion of the National Capital Interstate Air Quality Control Region.

(c) On or before January 1, 1975, all gasoline-powered light duty vehicles of model year prior to 1968 and subject under presently existing legal requirements to registration in the area described in paragraph (b) of this section shall be equipped with an appropriate vacuum spark advance disconnect device.

(d) The State of Maryland shall submit, no later than January 1, 1974, a detailed compliance schedule showing the steps it will take to implement and enforce this requirement. Such schedule shall include, as a minimum, the following:

(1) A date by which the State of Maryland will evaluate and approve devices for use in this program. Such date shall be no later than March 1, 1974.

(2) A date by which installation of this equipment shall commence. Such date shall be no later than June 1, 1974.

(3) A date on which all vehicles subject to this section will be equipped with such devices. Such date shall be no later than January 1, 1975.

(4) Designation of any agency or agencies responsible for evaluating and approving such devices for use on vehicles subject to this section.

(5) Designation of an agency or agencies responsible for ensuring that the prohibitions of paragraph (e)(2) of this section shall be enforced.

(6) Method and proposed procedures for ensuring that those persons installing the devices have the training and ability to perform the needed tasks satisfactorily and that an adequate supply of devices will be available.

(7) Provision (apart from the requirements of any program for periodic inspection and maintenance of vehicles generally) for emission testing at the time of device installation or some other positive assurance that the device is installed and operating correctly.

(e) After January 1, 1975, the following shall apply within the State of Maryland portion of the National Capital Interstate Air Quality Control Region.

(1) The State of Maryland shall not register a vehicle subject to this paragraph which is not equipped in accordance with paragraph (c) of this section.

(2) No owner of a light duty vehicle subject to this paragraph shall operate or allow the operation of any such vehicle that is not equipped in accordance with paragraph (c) of this section.

(f) The failure of any person to comply with any provision of this section shall render such person in violation of a requirement of an applicable implementation plan, and subject to enforcement action under section 113 of the Clean Air Act. As to compliance schedules, the State of Maryland will be considered to have failed to comply with the requirements of this regulation if it fails to submit on a timely basis the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

**§ 52.1098 Oxidizing catalyst retrofit.**

(a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of the vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbon and carbon monoxide from that vehicle.

(2) Fleet vehicle means any of 5 or more light duty vehicles operated by the same person(s), business, or governmental entity and used principally in connection

with the same or related occupations or uses. This definition shall also include any taxicab (or other light duty gasoline-powered vehicle-for-hire) owned by any individual or business.

(3) Governmental entity means any agency of the executive branch of the Federal government, or a state or local department, agency, bureau, board, office, commission, district, or unit of any other type (excluding foreign embassies) which employ personnel paid wholly with public funds.

(4) All other items used in this section which are defined in 40 CFR Part 51, Appendix N, are used herein with the meanings so defined.

(b) (1) This Section is applicable in the State of Maryland portion of the National Capital Interstate Air Quality Control Region.

(2) Classes of Vehicles Covered:

(i) Light duty fleet vehicles of model year 1971 through 1975, not already equipped with catalyst, or certified to meet original 1975 statutory light duty vehicle emission standards.

(e) The State of Maryland shall establish a retrofit program to insure that on or before May 31, 1977, classes of gasoline-powered light duty vehicles as specified in (b) (2) of this section which are subject under presently existing legal requirements to registration in the area defined in paragraph (b) of this section and are used on the streets and highways of the State, are equipped with an appropriate oxidizing catalyst retrofit device. No later than March 1, 1974, the State of Maryland shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use on motor vehicles subject to this section.

(2) Designation of an agency responsible for ensuring that the provisions of paragraph (c) (3) of this section are enforced.

(3) A provision that starting no later than May 31, 1976, the State of Maryland shall commence retrofitting oxidizing catalysts to those light duty motor vehicles able to operate properly on unleaded 91 RON gasoline. The installation shall be completed by May 31, 1977.

(4) A method and proposed procedure for ensuring that those installing the retrofits have the training and ability to perform the needed tasks satisfactorily and that they will have an adequate supply of retrofit components.

(d) After May 31, 1977, the State shall not register or allow to operate on public streets or highways and light duty gasoline-powered vehicles specified in paragraph (b) (2) of this section which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After May 31, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicles which does not comply with the applicable standards and procedures implementing this section.

(f) The State of Maryland shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section, and the text of needed statutory proposals and needed regulations which it will propose for adoption. The compliance schedule shall include a date by which the State shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1975.

(g) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. The State will be considered to have failed to comply with the requirements of this regulation if it fails to submit on time the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

**§ 52.1101 Control of evaporative losses from the filling of vehicular tanks.**

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the State of Maryland portion of the National Capital Interstate Air Quality Control Region.

(c) A person shall not transfer gasoline to an automotive fuel tank from gasoline dispensing systems unless the transfer is made through a fill nozzle designed to:

(1) Effect a vapor-tight fit between the fill nozzle and filler neck of the automotive fuel tank so as to prevent discharge of hydrocarbon vapors to the atmosphere.

(2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 90 percent by weight of the organic compounds in displaced vapors are recovered.

(3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.

(d) The system referred to in paragraph (c) of this section can consist of a vapor-tight vapor return line from the fill nozzle filler neck interface to the dispensing tank or to an adsorption, absorption, incineration, or refrigeration-condensation system or equivalent.

(e) Components of the systems required by § 52.1100 (c) can be used for compliance with paragraph (c) of this section.

(f) If demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of fill neck configuration, location, or other design features, the provisions of this paragraph shall not apply to tanks or vehicles existing at the time of promulgation of this regulation.

(g) The State of Maryland shall divide all facilities subject to this section into three classes, the first of which shall equal approximately 70 percent of hydrocarbon emis-

sions from all gasoline stations, the second and third classes shall each equal approximately 15 percent of total hydrocarbon emissions from these sources. The classes shall be known as Class I, Class II, and Class III.

(h) Except as provided in paragraph (k) of this section, the owner or operator of a source included in Class I shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1974.

(2) Initiation of on-site construction or installation of emission control equipment or process change must begin not later than July 31, 1974 [sic].

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1975.

(4) Final compliance is to be achieved not later than May 31, 1976.

(5) Any owner or operator of stationary sources, subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(i) The owner or operator of a source included in the Class II shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of components parts to accomplish emission control or process modification not later than March 31, 1975.

(2) Initiation of on-site construction or installation of emissions control equipment or process change must begin not later than July 31, 1975.

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1976.

(4) Final compliance is to be achieved not later than May 31, 1976.

(5) Any owner or operator of stationary sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(j) The owner or operator of a source included in Class III shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued from the purchase of component parts to accomplish emission control or process modification not later than March 31, 1975.

(2) Initiation of on-site construction or installation of emissions control equipment or process change must begin not later than July 31, 1976.

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1977.

(4) Final compliance is to be achieved not later than May 31, 1977.

(5) Any owner or operator of stationary sources, subject to compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(k) Paragraph (h) and (i) of this section shall not apply:

(1) To a source which is presently in compliance with paragraph (c) of this section and which has certified such compliance to the Administrator by December 31, 1973. The Administrator may request whatever information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by December 31, 1973, a proposed

alternative schedule. No such schedule may provide for compliance after May 31, 1975, in the case of Class I sources, and May 31, 1976, in the case of Class II sources. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.

(1) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (b) of this section fails to satisfy the requirements of § 51.15(b) and (c) of this chapter.

#### § 52.1100 Gasoline transfer vapor control.

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of four (4) pounds or greater.

(b) This section is applicable in the State of Maryland portion of the National Capital Interstate Air Quality Control Region.

(c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless such container is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location.

(1) The vapor recovery portion of the system shall include one or more of the following:

(i) A vapor-tight vapor return line from the storage container to the delivery vessel and a device that will ensure that the vapor return line is connected before gasoline can be transferred into the container.

(ii) Refrigeration-condensation system or equivalent designed to recover no less than 90 percent by weight of the organic compounds in the displaced vapor.

(2) The vapor-laden delivery vessel shall be subject to the following conditions:

(i) The delivery vessel must be so designed and maintained as to be vapor-tight at all times.

(ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with a vapor recovery system or the equivalent, which can recover at least 90 percent by weight of the organic compounds in the vapor displaced from the delivery vessel during refilling.

(d) The provisions of this paragraph (c) of this section shall not apply to the following:

(1) Stationary containers having a capacity less than 550 gallons used exclusively for the fueling of implements of husbandry; provided, however, said containers are equipped with submerged fill pipes.

(2) Any container having a capacity less than 2,000 gallons installed prior to promulgation of this paragraph.

(3) Transfer made to storage tanks equipped with floating roofs or their equivalent.

(e) Compliance schedule: Except as provided in paragraph (f) of this section, the owner or operator of any source subject to this section shall comply with this section on or before January 31, 1974.

(1) Any owner or operator in compliance with this section on the effective date of this regulation shall certify such compliance to the Administrator no later than 120 days following the effective date of this section.

(2) Any owner or operator who achieves compliance with this section after the effective date of this section shall certify such compliance to the Administrator within 5 days of the date compliance is achieved.

(f) Any owner or operator of a source subject to paragraph (e) of this section may, not later than 120 days following the effective date of this section, submit to the Administrator for approval a proposed compliance schedule that demonstrates compliance with the provisions specified in paragraph (e) of this section as expeditiously as practicable but no later than June 30, 1975. The compliance schedule shall provide for increments of progress toward compliance. The dates for achievement of such increments of progress shall be specified. Increments of progress shall include, but not be limited to:

submittal of final control plan to the Administrator; letting of necessary contracts for construction or process changes or issuance of orders for the purchase of component parts to accomplish emission control or process modification; initiation of on-site construction or installation of emission control equipment or process modification; completion of on-site construction or installation of emission control equipment or process modification; and final compliance.

(g) Any owner or operator who submits a compliance schedule pursuant to this paragraph shall, within 5 days after the deadline for each increment of progress, certify to the Administrator whether or not the required increment of the approved compliance schedule has been met.

#### § 52.1103 Management of Parking Supply.

(a) This section shall apply only in the event that the Administrator finds that the State of Maryland fails to take one or more of the following steps to implement the \$2.00 surcharge (or an equivalent measure):

(1) Complete study identifying locations where surcharge or equivalent measure shall apply and submit to the Administrator by May 30, 1974.

(2) Submit to the Administrator legally adopted regulations of the State of Maryland or other governmental entities to collect the surcharge or impose the equivalent measure by June 30, 1974.

(3) Institute the collection of the surcharge or impose the equivalent measures in those areas identified in the study by April 1, 1975.

(b) In the event the State of Maryland chooses to adopt any "equivalent measure" to this surcharge, the State of Maryland must submit to the Administrator by December 31, 1973, information demonstrating that such measure will in fact achieve the required result. Failure to demonstrate this fact adequately will cause the Administrator to determine that the State of Maryland is failing to implement the surcharge.

(c) In the event that the Administrator determines that the State of Maryland is failing to implement the \$2.00 surcharge (or an equivalent measure) he shall make this determination public in the FEDERAL REGISTER, and this section shall then be immediately effective.

(b) Definitions:

(1) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land to use as a parking facility.

(2) "Modification" means any change to a parking facility which increases the vehicle capacity of such facility.

(3) "Enlargement" means any physical change or addition to a parking facility which increases the vehicle capacity of such facility.

(4) "Commenced" means that an owner or operator has undertaken a continuous program of construction, modification, or enlargement.

(5) "Parking facility" (also called "facility") means any facility, building, structure, or lot or portion thereof used primarily for temporary storage of motor vehicles.

(c) No person, after the effective date of this section, shall commence construction of any new parking facility or modification or enlargement of any existing parking facility until he has first received from the Administrator or from an agency approved by the Administrator a permit stating the construction, modification or enlargement of such facility will not interfere with the attainment or maintenance of applicable Federal air quality standards.

(d) In order for any agency to be approved by the Administrator for purposes of issuing permits for construction of any new parking facility or any modification or enlargement of any existing parking facility, such agency shall demonstrate to the satisfaction of the Administrator that:

(1) Requirements for permit applications and issuance have been established. Such requirements shall include, but not be limited to, a requirement that before

a permit may be issued, the following findings of fact or factually supported projections must be made:

(i) The location of the facility.

(ii) The total motor vehicle capacity before and after the construction, modification, or enlargement of the facility.

(iii) The normal hours of operation of the facility and the enterprises and activities which it serves.

(iv) The number of people using or engaging in any enterprises or activities which the facility will serve.

(v) The number of motor vehicles using the facility on an average hourly basis and a peak hour basis.

(vi) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projections shall include data concerning the availability of public transit from such areas.

(2) Criteria for issuance of permits have been established and published. Such criteria shall include, but shall not be limited to:

(i) Full consideration of all facts contained in the application.

(ii) Provisions that no permit shall be issued if such permit will result in the increase of VMT within any area, the air quality of which fails to meet applicable Federal air quality standards.

(3) Agency procedures provide that no permit for the construction, enlargement or modification of a parking facility covered by this section shall be issued without notice and opportunity for public hearing. The public hearing may be of the legislative type; the notice shall conform to the requirements of 40 CFR Part 51.4(b); and the agency rules of procedure may provide that if no notice of intent to participate in the hearing is received from any member of the public (other than the applicant) prior to 7 days before the scheduled hearing date, no hearing need be held. Such a requirement, if imposed, shall be noted prominently in the required notice of hearing.

**§ 52.1096 Reduction of employee parking.**

(a) Definitions

(1) Governmental Entity—means a federal, state or local department, agency [sic] bureau, board, office, commission, district, or unit or any other type (excluding foreign embassies) which employs personnel paid wholly with public funds.

(2) Commercial Parking Rate—means the average rate charged by commercial parking facilities (excluding on-street parking meters) on a monthly basis within a 1 mile radius of a facility or installation covered by this section.

(3) Served by Public Transit—means that such transit is available during working hours within a reasonable walking distance of the employee's place of employment, even though such transit may not serve the area of the employee's residence.

(4) State Agency means State of Maryland, Bureau of Air Quality Control.

(b) This section shall be applicable in the State of Maryland portion of the National Capital Interstate Air Quality Control Region.

(c) (1) All facilities or installations owned, operated or leased by the federal government which control, operate or lease a parking facility containing 25 or more spaces, shall by January 1, 1974, report to the Administrator the number of parking spaces in each such facility as of October 15, 1973. This number shall not include residential (including barracks) parking spaces contained in or on the facility or installation.

(2) The chief administrative officer of all facilities or installations subject to paragraph (c) (1) of this section, shall by April 1, 1974, submit to the Administrator a detailed report specifying the level of public transit service to the facility and also the parking space utilization at the facilities or installations under his or her control at that time. This report shall include but is not limited to:

(i) All public transit lines which have stops within one-half mile of any such installation or facility.

(ii) The practicality of the operation of shuttle service from presently well serviced locations such as Friendship Heights, Silver Spring to the facility or installation during morning and afternoon peak hours.

(iii) A summary of the existing parking situation at the facility including:

(a) Average vehicle occupancy calculated from a visual survey of vehicles entering and leaving the facility over a full week's time.

(b) The percentage of vehicles with one, two, three and four occupants.

(c) The total number of vehicles using the facility daily.

Should the report state that the facility or installation is not presently served by public transit, this report shall be reexamined, updated, and submitted annually not later than April 1 of each successive year.

(d) (1) All facilities or installations owned, operated, or leased by state and local governments which control, operate or lease a parking facility containing 25 or more spaces, shall by January 1, 1974 report to the State Agency the number of parking spaces in each such facility as of October 15, 1973. This number shall not include residential parking spaces contained in or on the facility or installation or publicly owned commercial type parking facilities.

(2) The chief administrative officer of all facilities or installations, subject to paragraph (d) (1) of this section, shall be [sic] April 1, 1974 submit to the State of Maryland, Bureau of Air Quality Control, a detailed report specifying whether the facilities or installations under his or her control are served by public transit at that time. This report shall include, but is not limited to:

(i) All public transit lines which have stops within one-half mile of any such installation or facility.

(ii) The practicality of the operation of shuttle service from presently well serviced location [sic] such as

Friendship Heights, Silver Spring to the facility or installation during morning and afternoon peak hours.

(iii) A summary of the existing parking situation at the facility including:

(a) Average vehicle occupancy calculated from a visual survey of vehicles entering and leaving the facility over a full week's time.

(b) The percentage of vehicles with one, two, three and four occupants.

(c) The total number of vehicles using the facility daily. Should the report state that the facility or installation is not presently served by public transit, this report shall be reexamined, updated and submitted annually, not later than April 1 of each successive year.

(e) Each governmental entity subject to paragraphs (c) (1) and (d) (1) of this section, and which in the opinion of the Administrator of State Agency is served by public transit shall comply with either paragraphs (e) (1) or (2) of this section. This governmental entity shall either:

(1) Adopt a plan whereby a charge equivalent to commercial parking rates will be imposed for parking at any such parking facility owned, operated or leased by the governmental entity. In no case shall the charge be less than \$20.00 per space per month. Any funds collected by any governmental entity under this subparagraph may be used for any legitimate governmental purpose, *Provided, however,* That no such funds shall be used to subsidize directly or indirectly employee parking; or

(2) Adopt a plan to reduce the number of parking spaces in each such facility from the number in existence on October 15, 1973, according to the following:

(i) By November 30, 1974, a reduction of 4 percent

(ii) By February 28, 1975, a reduction of 8 percent

(iii) By May 31, 1975, a reduction of 12 percent

(f) (1) Each entity of the Federal government subject to paragraph (e) of this section shall submit to the Administrator no later than June 30, 1974, a detailed com-

pliance schedule showing steps it will take to achieve either the required reduction of spaces, or the initiation of commercial parking rates. In the case of a reduction of spaces, the schedule shall include provisions for marking those spaces to be eliminated in a manner obvious to members of the public (painting over, roping off, etc.). In the case of the initiation of commercial parking rates the schedule shall include:

(i) A date for the initial imposition of the charge. Such date shall be no later than January 1, 1975.

(ii) The amount to be charged per space per month.

(iii) Any exceptions to the charge (e.g., handicapped personnel, certain high level officials of the governmental entity), including documentation of the need and rationale for such exceptions.

(iv) Provisions for annual reevaluation of the amount charged per space per month based upon any changes in commercial parking rates.

(2) Each entity of a State or local government subject to paragraph (e) of this section shall submit to the State Agency no later than June 30, 1974, a detailed compliance schedule showing steps it will take to achieve either the required reduction of spaces or the initiation of commercial parking rates. In the case of a reduction of spaces, the schedule shall include provisions for marking those spaces to be eliminated in a manner obvious to members of the public (painting over, roping off, etc.). In the case of the initiation of commercial parking rates, the schedule shall include:

(i) A date for the initial imposition of the charge. Such date shall be no later than January 1, 1975.

(ii) The amount to be charged per space per month.

(iii) Any exceptions to the charge (e.g., handicapped personnel, certain high level officials of the governmental entity), including documentation of the need and rationale for such exceptions.

(iv) Provisions for annual reevaluation of the amount charged per space per month based upon any changes in commercial parking rates.

(g) Failure to submit any report or compliance schedule as required by this section shall render the person so failing to comply in violation of an applicable implementation plan and subject to enforcement action under § 113 of the Clean Air Act. Any governmental entity which either allows vehicles to be parked in excess of the number allowable, or which fails to collect commercial parking charges, shall likewise be in violation and subject to enforcement.

**§ 52.1102 Elimination of drycleaning losses.**

(a) Definition:

(1) A photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:

(i) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers or ketones having an olefinic or cycloolefinic type of unsaturation: 5 percent;

(ii) A combination of aromatic compounds with eight or more carbon atoms to the molecule except ethylbenzene: 8 percent;

(iii) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene: 20 percent;

Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

(b) This section is applicable in the Maryland portion of the National Capital Interstate Air Quality Control Region.

(c) After May 31, 1974, no person shall cause, suffer, allow, or permit the use of any photochemically reactive

organic solvent for the purpose of drycleaning of clothing and household items.

(d) The owner or operator of any premise subject to the requirements of this section shall within 30 days of the effective date of this regulation submit to the Administrator the following information:

(1) Location of premise.

(2) Source of supply and identifying name, number or purchase specification for all drycleaning solvents used.

(e) Any owner or operator who fails to fulfill any requirement of this section shall be in violation of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act.

**§ 52.1099 Peak hour delivery ban regulation.**

(a) Definitions:

(1) *Peak Hours*—The hours 6:00 AM to 9:30 AM Monday through Saturday.

(2) *Delivery Ban*—A program to reduce emissions from in-use heavy duty gasoline powered vehicles employed to deliver goods within the specified peak hours.

(3) *Heavy Duty Gasoline Powered Vehicle*—Any motor vehicle either designated primarily for transportation of property and rated more than 6,000 pounds GVW and which is powered by a gasoline burning engine. This shall not include mail trucks, and emergency type vehicles such as fire trucks and police wagons.

(4) All other terms used in this section which are defined in 40 CFR Part 51, Appendix N are used therein with the meaning so defined.

(b) This regulation is applicable in the State of Maryland portion of the National Capital Interstate Air Quality Control Region.

(c) The State of Maryland counties of Prince Georges, Montgomery and all incorporated cities located within such county [sic] shall establish a peak hour, heavy duty gasoline powered vehicle use prohibition on streets and highways over which each entity has ownership and control. No later than February 1, 1974, each governmental

entity shall submit to the Administrator a legally enforceable program which shall include:

(1) Provisions for initiation of the ban no later than June 30, 1974.

(2) The prohibition shall state that heavy duty gasoline powered vehicles making deliveries in violation of the prohibition shall either be towed away, or the owner and/or operator subject to a fine of up to \$100, or both.

(d) The State of Maryland, counties and all incorporated cities within such counties subject to this section shall submit, no later than February 1, 1974, a detailed compliance schedule showing the steps it will take to establish and enforce a peak hour delivery ban. The compliance schedule shall include the date by which the jurisdictions will recommend needed regulations to the appropriate body, and will identify the state, county, or city official responsible for enforcement.

(e) Failure to comply with any provisions of this regulation shall render such person in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. A state or other governmental entity will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule.

#### § 52.1104 Limitation of off-street parking.

(a) This section shall apply only in the event that the Administrator finds that the State of Maryland fails to take one or more of the following steps to implement the \$2.00 surcharge (or an equivalent measure):

(1) Complete study identifying locations where surcharge or equivalent measure shall apply and submit to the Administrator by May 30, 1974.

(2) Submit to the Administrator legally adopted regulations of the State of Maryland or other governmental entities to collect the surcharge or impose the equivalent measure by June 30, 1974.

(3) Institute the collection of the surcharge or impose the equivalent measure in those areas identified in the study by April 1, 1975.

(b) In the event the State of Maryland chooses to adopt any "equivalent measure" to this surcharge, the State of Maryland must submit to the Administrator by December 31, 1973, information demonstrating that such measure will in fact achieve the required result. Failure to demonstrate this fact adequately will cause the Administrator to determine that the State of Maryland is failing to implement the surcharge.

(c) In the event that the Administrator determines that the State of Maryland is failing to implement the \$2.00 surcharge (or an equivalent measure) he shall make this determination public in the Federal Register, and this section shall then be immediately effective.

#### (d) Definition:

(1) The term "off-street parking facility" means any land or building or portion of a building set aside for the purpose of storing a maximum capacity of 10 or more vehicles on a temporary basis.

(e) Each governmental entity, public agency, private corporation, partnership or sole proprietor owning or operating an off-street parking facility located within the State of Maryland portion of the National Capital Interstate Air Quality Control Region shall, within 30 days of the effective date of this regulation, report to the Administrator the number of parking spaces in each such facility under its ownership or control [as] of the effective date of this regulation. The number used solely for the storage of vehicles of persons who reside within  $\frac{1}{4}$  mile of the facility shall not be counted.

(f) Each such owner or operator of any off-street parking facility located within the area specified in paragraph (c) of this section shall reduce the number of affected parking spaces in each such facility from the number in existence as of the date this regulation becomes effective according to the following schedule:

(1) Within 90 days of the effective date—a 5 percent reduction;

(2) Within 120 days of the effective date—a 10 percent reduction;

(3) Within 180 days of the effective date—a 15 percent reduction.

(g) Each such owner or operator of an off-street parking facility subject to the requirements of this section shall submit to the Administrator, no later than 60 days after the effective date of this section, a detailed compliance schedule showing the steps it will take to achieve the required reduction in parking spaces. Such schedule shall provide for the marking in some manner obvious to the public (such as painting over, roping off, or the like) of the eliminated spaces on which parking is not permitted pursuant to this section.

(h) Failure to submit a compliance schedule as required by this section shall render the person or governmental entity so failing in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. Any owner or operator of an off-street parking facility who allows any vehicle to be parked on any parking space which has been eliminated pursuant to this section, or who fails to mark clearly those spaces which have been eliminated, shall likewise be in violation and subject to enforcement.

[FR Doc. 73-15628 Filed 8-1-73; 8:45 am]

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[40 CFR Part 52]

**VIRGINIA; APPROVAL AND PROMULGATION OF  
IMPLEMENTATION PLANS**

**Notice of Proposed Rule Making**

The transportation control plan submitted by the Commonwealth of Virginia for attainment of the primary national ambient air quality standards for carbon monoxide (CO) and photochemical oxidants (Ox) for the Virginia portion of the National Capital Interstate Region was disapproved in part on June 15, 1973 (38 FR 16563). This notice of proposed rulemaking sets forth regulations which in the Administrator's judgment could be implemented in addition to the approvable portions of the Virginia plan to attain and maintain the national standards for carbon monoxide and photochemical oxidants in the Virginia portion of the National Capital Interstate Region.

If revisions to the Virginia plan are submitted and determined to be approvable prior to Federal promulgation, these proposed regulations will be withdrawn. If revisions to the Virginia plan are submitted and determined to be approvable after Federal promulgation, then those Federal regulations will be rescinded. It is the desire of the Environmental Protection Agency that the plan to attain and maintain the carbon monoxide and photochemical oxidant standards in the Virginia portion of the National Capital Interstate Region be a State plan carried out by the Commonwealth of Virginia or its designated representative.

**TRANSPORTATION CONTROL ALTERNATIVES**

Analysis of the air quality problems in the National Capital Interstate Region, which is partly located in the Commonwealth of Virginia, reveals that both photochemical oxidants and carbon monoxide exhibit unacceptably

high levels in the region, with the former being the pacing pollutant.

Since a substantial proportion of the photochemical oxidant problem and almost all of the carbon monoxide problem are the result of automotive vehicle emissions, measures to reduce emissions from individual vehicles and measures to reduce vehicular travel can be effective in improving air quality. Since a significant percentage of the oxidant-producing hydrocarbon emissions stem from vehicle-related sources associated with gasoline handling operations, measures to reduce these operational losses can also provide a measurable improvement in the regional air quality.

Reductions in emissions from vehicles can be obtained through inspection and maintenance programs and from incorporation of various retrofit devices. Reductions in Vehicle Miles Traveled (VMT) can be achieved through various pricing and taxing schemes for road use, adoption of parking restrictions, including limitations of available number of parking spaces, restrictions on idling or cruising of fleet vehicles, selective control of goods movement, the establishment of vehicle-free zones, establishment of a four-day work week, programs promoting the use of carpools or alternative modes of transportation, and limitations on gasoline usage. It must be emphasized that, in order to be effective, each VMT control measure proposed or adopted by the Commonwealth of Virginia must be reflected by identical or equivalent measures in the neighboring jurisdictions of Maryland and the District of Columbia for their portions of the National Capital Interstate Region.

In effecting substantial improvements in air quality, improvements in and expansion of public transportation facilities are a necessary and effective complement facilitating use of this alternative to the private automobile. Clearly, public transit improvements must be implemented in concert with the appropriate level of vehicle restraints, as determined by the regional characteristics of the private automobile use demand elasticity. Such improvements as greater coverage, increased frequency

of service, improved reliability, increased comfort and convenience, a reasonable cost, and adequate personal security will further encourage the use of public transit alternatives to the private automobile.

#### SUMMARY

The Virginia plan, as amended by the July 9, 1973, submission, in its demonstration of the attainment of the photochemical oxidant and carbon monoxide air quality standards, utilizes seven general measures. These are: the Federal Motor Vehicle Control Program, the Virginia Motor Vehicle Inspection and Maintenance Program for light duty vehicles, improvement in public transportation, increased terminal (or parking) costs, car pool locator service, restrictions on aircraft ground operations, and control of stationary source emissions. According to the Virginia plan, which utilizes data by the Metropolitan Washington Council of Governments for the entire National Capital Interstate Region, peak period hydrocarbon emissions were 63.3 tons for the region as a whole and peak period carbon monoxide emissions were 1133.5 tons in 1972. In order to demonstrate attainment of standards, the Council of Governments' calculations indicate that hydrocarbon emissions must be reduced by 67 percent of the 1972 emissions in the National Capital Interstate Region to a level of 20.9 tons/peak period, and that carbon monoxide emissions must be reduced by 55.6 percent of the 1972 emissions in the Region to a level of 501 tons/peak period.

Including projected increase in vehicle miles of travel, the Federal Motor Vehicle Control Program will reduce hydrocarbon peak period emissions by 47 percent to 33.6 tons and will reduce carbon monoxide peak period emissions by 49.0 percent to 576 tons/peak period by 1977. These estimates are adjusted to reflect the 1975 interim motor vehicle emission standards as announced on April 11, 1973.

Since the 21-day period for public comment on the additional submission has not been completed, it is impossible for the Administrator to make a final decision on

approval or disapproval of the strategies included in the Virginia plan at this time. This decision must take into consideration all comments received during this time. However, preliminary review by EPA indicates that certain strategies are likely to be approvable. Accordingly, the Agency is proposing only those items which, when added to the approvable measures, are necessary to attain the National Ambient Air Quality Standards.

If an apparently approvable strategy is determined not to be approvable, additional measures will be proposed.

The information contained in the additional submissions by Virginia appears to remedy many of the deficiencies on which the Administrator's June 15 decision was based.

The following is a summary of the actions EPA is proposing to take with respect to the Virginia Plan:

*Federal Motor Vehicle Control Program*—Reductions appear to be approvable based on projected vehicle populations and emission factors.

*Motor Vehicle Inspection Program*—Appears to be approvable, based upon proposed regulation and supporting data.

#### *Improvements in Public Transit*

(a) Virginia participation in the area wide addition of 750 buses to current fleet—appears to be approvable, contingent upon clarification of certain administrative details.

(b) Exclusive Bus Lanes—appears to be approvable.

(c) System Improvements (i.e., shelters, fringe parking, improved scheduling)—Appears to be approvable.

#### *Increased Terminal Charges*

(a) Elimination of free off-street, employee parking in certain areas—does not appear to be approvable.

(b) Elimination of on-street long-term parking in certain areas—appears to be approvable.

(c) \$2.00 parking surcharge (or an equivalent measure)—appears to be approvable.

*Bus/Carpool Locator Program*—Appears to be approvable.

*Restrictions on Aircraft Ground Operations*—Partial reductions are allowable; appears to be partially approvable.

*Increased Control of Stationary Source Emissions*—Not approvable at this time due to lack of adopted regulations.

Due to the fact that:

a. Full reductions claimed for aircraft emissions do not appear to be allowable,

b. The plan did not include controls over heavy duty gasoline powered vehicles,

c. The portion of the plan dealing with elimination of free off-street employee parking does not appear to be approvable, and

d. The controls over stationary sources cannot be approved at this time.

EPA is proposing the following measures:

a. Initiation of commercial-type parking rates or reduction by 12 percent the available spaces at any federal, state, or local government facility which has 25 or more parking spaces and which is located in a high density employment area which is well serviced by public transit.

b. Retrofit by 1975 of all pre-1968 vehicles with a vacuum spark advance disconnect kit.

c. Retrofit of light duty 1971-1975 fleet vehicles (including federal government vehicles) and taxicabs with an oxidizing catalyst retrofit—beginning in mid-1976, to be completed by mid-1977.

d. Controls of emissions of hydrocarbons due to gasoline handling; both from the delivery truck to underground tank and from the pump to the vehicle. Implementation begins in 1974 and is fully completed by 1977.

e. Ban of heavy-duty-gasoline-powered vehicles (except emergency vehicles, mail trucks, etc.) from 6:00 a.m. to 9:30 a.m. beginning July 1, 1974.

Finally, since the \$2.00 surcharge proposed by Virginia is integral to the success of this plan, EPA is proposing contingency strategies to be implemented if appropriate steps are not taken to implement the surcharge. These contingency measures are:

- A ban on the construction, modification or enlargement of any parking facility without having first obtained a permit from the Administrator.
- A phased 15 percent reduction in the number of off-street parking spaces.

The Administrator invites comments on these and any other measures which may be used to achieve the national ambient air quality standards for photochemical oxidants and carbon monoxide.

#### TWO-YEAR EXTENSION TO ACHIEVE STANDARDS

The Administrator proposes to give a two-year extension for the attainment of the standard in the Commonwealth of Virginia. To attain the standards in 1975 would require stringent restraints on vehicle miles traveled which could not be considered to be "reasonably available," within the meaning of section 110 (c) of the Clean Air Act, or the implementation of a widespread catalytic retrofit program which could not be implemented due to technological problems before 1977. Although some measures have not been proposed here which have appeared in some other proposals, such as gasoline limitations and a selective vehicle exclusion program involving colored tags, the reduction in vehicle miles traveled expected from measures contained herein appears to be substantial and adequate to fulfill the requirement that reasonably available alternative measures be employed before an extension is given for any strategy. The plan proposed herein, along with the apparently approvable measures submitted by the Commonwealth of Virginia applies the reasonably available alternative means of control at the earliest possible dates. Comment is invited on any measures which have not been considered and applied and which can be considered to be reasonably available.

COMPILED OF CONTROL STRATEGY EFFECTS FOR THE NATIONAL CAPITAL INTERSTATE REGION ON MAY 31, 1977

Carbon Monoxide		Hydrocarbons		
	Tons per Peak Period	Percent of Total Reduction Required	Tons per Peak Period	Percent of Total Reduction Required
Stationary Source Emissions Without Control Strategy	78		14.3	
Expected Reductions From:				
(a) Dry Cleaning Vapor Recovery	0	0	1.1	8.7
(b) Gasoline Handling Vapor Recovery	0	0	5.0	39.4
(c) Other Statutory Source Rule Strengthening	0	0	0	
Stationary Source Emissions Remaining	78		8.2	
Mobile Emissions from Highway Light and Heavy Duty Vehicles without Control Strategy	498		19.3	
Expected Reductions From:				
(a) Inspection and Maintenance	26	34.6	1.5	11.8
(b) VSAD Retrofit, pre-'68 cars	3	4.0	0.4	3.2
(c) Catalytic Retrofit of Fleet LDV's	5	6.7	0.2	1.6
(d) Mass Transit Improvements	21	28	2.7	21.2
(e) HDV Peak Hour Delivery Ban	27	36	1.0	7.9
(f) Aircraft Model Program	12	0.8	0.8	6.4
Mobile Emissions Remaining	416		12.7	
Total Emissions without Strategy (FMVCP Included)	576		33.6	
Total Reductions	82	169.3	12.7	100.2
Total Emissions Remaining	494		20.9	

#### PROPOSED CONTROLS ON STATIONARY SOURCES

The major stationary sources of hydrocarbon emissions, which have been identified in the Virginia plan, are the gas handling losses which occur in the distribution system for gasoline fuel, and the emissions losses from dry cleaning establishments. Since present regulations are inadequate to effect any substantial control of the resultant emissions, from gasoline distribution, the Commonwealth of Virginia has proposed regulations and compliance schedules which would reduce gasoline handling losses by 90 percent.

The regulation proposed by the Commonwealth of Virginia for control of hydrocarbon evaporative emissions at retail service stations and fleet owned stations requires the installation of 90 percent effective vapor recovery devices at stations handling over 50,000 gallons per month by May 31, 1975, and at stations handling over 25,000 gallons per month by May 31, 1977.

It is estimated that installations of 90 percent effective vapor recovery devices on all these service stations throughout the region will result in a total reduction of hydrocarbon emissions of 5.0 tons/peak period (6-9 a.m.) by May 31, 1977.

The Commonwealth of Virginia proposed the following additional regulations for the control of hydrocarbon emissions from stationary sources in the Northern Virginia portion of the National Capital Interstate Region:

(a) *Effluent Oil Water Separators*, which recover more than 200 gallons per minute of any petroleum product, are required to be equipped with vapor recovery devices which reduce the emissions of all hydrocarbon vapors and gasses into the atmosphere by at least 90 percent by weight.

(b) *Storage of Petroleum Products*, in any container of more than 40,000 gallons capacity is forbidden unless the container is a pressure tank maintaining working pressures sufficient at all times to prevent hydrocarbon vapor or gas loss to the atmosphere, or is equipped with a floating roof or a vapor recovery system.

(c) *Organic Liquid Loading (Bulk Terminals)*, shall be accomplished in such a manner that all displaced vapor and air will be vented out to a vapor collection system.

(d) *Gasoline Loading (Submerged Fill)*, into any stationary tank with a capacity of 250 gallons or more is forbidden unless such tank is equipped with a vapor loss control device, or is a pressure tank as described in section (b).

Since photochemical reactive solvents are not used by any dry cleaning establishment in the Virginia portion of the National Capital Interstate Region, the hydrocarbon emission reduction by 1.1 tons per peak period is achievable without further specific action by Virginia.

The foregoing regulations as proposed by the Commonwealth of Virginia appear to be adequate to achieve the anticipated reduction in hydrocarbon emissions. However, the Administrator cannot approve these proposed regulations at this time, since 40 CFR Part 51 requires that all regulations dealing with the control of emissions from stationary sources be adopted at the time of submittal of

the plan. EPA is therefore proposing to promulgate similar regulations which will be rescinded upon submission of equivalent regulations as adopted by the Commonwealth of Virginia.

#### PROPOSED CONTROLS ON MOBILE SOURCES

##### (NON-AIRCRAFT)

The Commonwealth of Virginia, in its July 9, 1973 submission of additions and revisions to the implementation plan, proposes an idle mode emission inspection program with an initial failure rate of 30 percent in conjunction with its existing annual safety inspection program. The proposed timetable for legal authority (by July 1974), initiation of the inspection program (by January 1975) and completion of the first cycle (by June 1975) provides an enforceable measure for improving air quality by means of a 10 percent reduction in hydrocarbon emissions from light duty vehicles by mid-1975. Therefore, the Administrator feels that this portion of the Commonwealth of Virginia plan is approvable. Anticipated emissions reductions from the inspection/maintenance programs as proposed throughout the National Capital Interstate Region, are 1.5 tons per peak period for hydrocarbon and 26 tons per peak period for carbon monoxide.

In order to comply with the requirements of the Clean Air Act that primary standards be achieved as expeditiously as practicable, the Administrator proposes to promulgate a regulation requiring that on or before January 1, 1975, all pre-1968 light duty vehicles be retrofitted with a vacuum spark advance disconnect device which will reduce hydrocarbon emissions from such vehicles by 25 percent. If implemented throughout the National Capital Interstate Region, installation of these devices will result in a total reduction of hydrocarbon emissions of 0.4 tons per peak period and a total reduction of carbon monoxide emissions of 3 tons per peak period.

In order to attain the primary air quality standard by May 31, 1977, additional measures are required beyond

those proposed by the Commonwealth of Virginia. Since catalytic retrofit devices for light duty vehicles are expected to be readily available by 1977, it is proposed to require installation of these devices on selected segments of the light duty vehicle population. These segments include all 1971-1975 LDV fleet vehicles (e.g., taxis, GSA vehicles, rental cars, fleet delivery vehicles), capable of operating on 91 RON gasoline.

The regulation proposed by the Administrator will require that the vehicles designated be equipped with catalytic retrofit devices by May 31, 1977, effecting a 50 percent hydrocarbon emission reduction for each vehicle. Exemptions will be allowed for all 1975 vehicles originally equipped with the oxidizing catalytic converter on those vehicles which are certified to meet the original statutory federal emission standards for 1975. Based on information currently available to him, the Administrator estimates that:

Fleet vehicles account for 6 percent of total mobile source emissions. On the basis that one-third of the fleet vehicles will be older than two years (pre-1976), and catalytic retrofits can reduce automotive emission from each vehicle by 50 percent, it is apparent that this measure, when applied on a Region-wide basis, will result in a hydrocarbon emission reduction of 0.2 tons/peak period.

In the event that the measures proposed herein prove to be inadequate, the Administrator is required by law to apply additional reasonably available alternatives, including catalytic retrofit of other segments of 1968-1975 light duty vehicle population. Candidate segments include all light duty trucks, or passenger vehicles of specified model years. The public is urged to comment on these or any other type of control measure that may help to achieve the National Ambient Air Quality Standards.

#### PROPOSED REDUCTIONS IN VMT

According to computer printouts provided by the Metropolitan Washington Council of Governments, the

Commonwealth of Virginia's transportation package (including participation in the area wide expansion of transit by 750 buses, exclusive bus/carpool lanes, a carpool locator service, and extensive parking restrictions) will result in a 12 percent reduction in 6-9 a.m. VMT and a corresponding reduction in total trips.

The Virginia plan includes the following strategies under its transportation measures:

(1) Participation with D.C. and Maryland in an area wide improved transit system, including the addition of 750 buses to the current area fleet, the establishment of exclusive bus lanes, bus shelters, and fringe parking facilities.

(2) Increased terminal cost, including the elimination of free parking and the establishment of a \$2.00 parking surcharge for long term commuter parking in all areas adequately served by mass transit.

(3) Establishment of a computerized carpool locator service.

This portion of the plan is central to the Virginia plan for reduction of HC and CO emissions. Therefore, to avoid confusion and expedite comments, a discussion of the elements that make up this portion of the plan shall be included.

a. **Elimination of Free Parking**—The Commonwealth of Virginia proposes to have EPA eliminate off-street parking for federal employees; once this has occurred, the plan proposes that other employers (state, local government and private businesses) will then begin a program to eliminate free parking for their employees. The plan also calls for a reduction of available on-street spaces which will be achieved by the elimination of street parking for commuters.

The elimination of on-street spaces will initially be imposed in the Rosslyn and Crystal City areas of Arlington County and downtown Alexandria. Other high density employment areas will be analyzed for future restrictions as bus service expands. This program is scheduled for implementation in early 1975.

On the basis of the information submitted by Virginia, it is the Administrator's opinion that the portion of the Virginia plan dealing with elimination of on-street parking is approvable.

The reduction in off-street parking proposed by the plan is conceptually acceptable; however, there is not enough of a firm commitment indicated in the plan to permit approval of this element of the plan at this time. Therefore, EPA intends to propose those same strategies which Virginia had suggested in its plan, and thereby provide the firm commitment to implement Virginia's strategy.

As pointed out in Virginia's plan, reduction of emission due to work trips by Federal Government employees into, out of, and within Virginia is integral to achieving air quality goals. Therefore, EPA feels it has the responsibility to aid Virginia in the control of these emissions. As a result, EPA will follow Virginia's suggestion and propose a federal regulation which would effectively reduce emissions as a result of commuter trips by federal employees. This will be done by requiring Federal Facilities in high density areas served by mass transit to either eliminate free parking (by establishing commercial type rates) or to reduce the available parking spaces in these facilities by 12 percent.

Since the other jurisdictions in the AQCR have also proposed to eliminate free parking for employees of its government and Virginia's plan is unclear on this point, EPA is also proposing that State and local government parking facilities which have 25 or more spaces and which are located in high density employment areas which are served by public transit either eliminate free parking or reduce the available spaces by 12 percent. It is EPA's opinion that since this plan is regional in nature that this action is necessary to insure that the reductions achievable by this measure do, in fact, occur.

The Administrator feels that the result of this proposal will be to induce employees to utilize alternate modes of transportation such as buses and carpools and thereby reduce the VMT in the area. It should be noted that this proposal should result in a reduction of VMT for the

entire National Capital area because it will reduce VMT of employees from all three jurisdictions.

It is the Administrator's opinion that, at a minimum, the Rosslyn, Crystal City, Pentagon, and Downtown Alexandria areas, along with other areas would, in all likelihood, need to be included in any definition of "high density employment area which is serviced by mass transit" for this strategy to be effective.

b. \$2.00 Surcharge (or its equivalent)

The Virginia plan proposes the imposition of a \$2.00 per day surcharge (or an equivalent measure) on all long term parking facilities in employment areas which are adequately served by mass transit. Identification of the areas where the surcharge is to be imposed should be made by Virginia within the next 10 months upon completion of studies of the matter.

This proposal calls for the charge to be implemented and enforced by Arlington County or the Northern Virginia Transportation Commission (NVTC). The Administrator feels that if implemented, according to the schedule provided in the plan, this proposal is approvable.

It is well documented that no matter how well designed and operated a mass transit system is, unless there are disincentives to the use of the private automobile, mass transit shall be ineffective. Therefore, Virginia's proposals [sic] for the surcharge is integral to the success of the plan.

The Administrator wants to make it clear that if for any reason this strategy is not implemented according to schedule, he will institute equivalent measures. In order to avoid any delay in implementation of such equivalent measures and to invite timely public comment, the Administrator is proposing contingency measures in the plan which will become effective if it becomes apparent that the surcharge will not be implemented. Specifically, a phased 15% reduction in existing off-street parking spaces would be imposed, as well as ban on the construction, modification or enlargement of any parking facility without first obtaining a permit from the Administrator or a specified local Agency. Public comments are solicited on these contingency proposals.

**c. Mass Transit Improvements**

The development of an effective mass transit system is essential to the development of an effective transportation control strategy. If this control plan is to be successful, a sufficient number of buses with convenient service and adequate schedules must be provided. The improvement in the transit system is an area wide measure in which Virginia will participate with District of Columbia and State of Maryland.

The Virginia plan proposes that NVTC, which represents the local governments in Northern Virginia in public transportation matters, shall take all possible measures to assure that the area wide transit system's current fleet size is increased by 750 buses and that service and convenience for commuters is improved. Included in this proposal are provisions for installing bus shelters, providing expanded fringe parking, additional public information and improved scheduling. In addition, Virginia plans to institute a number of exclusive bus lanes on major highway corridors in the area. The local jurisdictions in conjunction with NVTC have allocated funds to provide subsidies to support a lowering and equalization of transit fares throughout Northern Virginia. All of these measures are meant to provide the increased mass transit service which will be necessary if air quality standards are to be achieved.

Based on the information contained in the documents submitted by Virginia, the Administrator believes that the proposals for increased mass transit are approvable, on the condition that certain administrative details are provided to him by the Commonwealth. Specifically, the arrangements or agreements which will trigger the expansion of the fleet should be clarified, since it is necessary for EPA to determine what actions are necessary to bring about any additional purchases of buses. Also a clarification on the schedule showing the projected incremental increases in fleet size should be provided.

**d. Bus/Carpool Locator System**

The Virginia plan recognizes the need for more efficient utilization of current automobile usage. Thus, the

plan proposes a voluntary bus/carpool locator matching service. This system will attempt to assemble lists of commuters with similar work schedules and home, [sic] work locations, and will be phased in starting with a pilot project during 1973. Full operation of the system is scheduled for April 1974. The Administrator feels that this measure is approvable, and encourages residents of the National Capital area to take advantage of this service.

Along with the benefits accruing to this system in terms of a potential decrease of vehicle miles traveled, this system also has the advantages of fuel conservation and it will mitigate the impact of disincentives to private auto use (i.e., the surcharge and elimination of free employee parking).

**e. Heavy Duty Vehicle Restraints**

In addition to the transportation measures described above, the Virginia plan discusses the problem of heavy-duty gasoline-powered vehicle emissions. The plan does not propose any measures to control these emissions; however, the plan discusses the possibility of either a heavy-duty vehicle ban between 6-9 a.m. or an emissions control retrofit program for Heavy Duty Trucks. The discussions indicate the need to achieve a 50 percent reduction in emissions from such vehicles to meet the standards by 1977. Such a strategy would be complementary to the approvable heavy duty emission control measures included in the District of Columbia plan and the concepts discussed in the Maryland plan.

Since the Virginia plan does not actually propose any heavy duty truck measures, the Administrator must propose a regulation which will achieve the required reductions. Therefore, EPA is proposing a delivery ban on heavy duty gasoline-powered vehicles which will be effective during the peak traffic period (6:00 a.m.-9:30 a.m.). The ban will take effect July 1, 1974. The Administrator recognizes that the District of Columbia will impose this ban on January 1, 1974; however, in order to allow Virginia adequate time to adopt regulations and plan for implementation of this ban, the additional implementation time is warranted.

EPA has not proposed the heavy duty vehicle retrofit strategy discussed by the state of Virginia. Though a heavy duty retrofit strategy was proposed by the State of New York and approved by EPA, the uncertainties in its implementation date are such that EPA does not feel justified in proposing its establishment as a Federal Program. If the Commonwealth of Virginia wishes to propose a heavy duty strategy as a state program in a manner similar to New York's, then it may well be approved provided it is consistent with the New York Program.

It is recommended that if the Virginia Air Resources Board is considering for its plan a measure that requires the retrofit of heavy duty vehicles, it should actively work with the New York City Bureau of Motor Vehicle Pollution Control which has already made much progress in this area. For the approach to be approvable, Virginia must provide written commitments that appropriate arrangements will be made with the state of New York. This will provide a greater assurance that an acceptable device will be available in the Virginia portion of the National Capital Interstate Air Quality Control Region. However, even if Virginia were to adopt this strategy in conjunction with New York, reductions could not be achieved until 1977.

The Clean Air Act dictates that the Administrator must apply reasonably available interim strategies. The Administrator feels that reductions in emissions from this type of vehicle are possible through imposition of restraints in use of this type of vehicle.

#### AIRCRAFT EMISSION REDUCTIONS

Aircraft emissions, as they affect ambient air quality, occur during approach, landing, taxi, idle, takeoff, and climbout. Heaviest emissions occur during taxi and idle when aircraft engines are operated at greatly reduced power.

The Virginia Transportation Control Plan asserts that control of these emissions through modified ground operations at Dulles and Washington National Airports can result in a significant hydrocarbon, and carbon monoxide

emission reduction in the National Capital Region. Virginia contends that a 50 percent reduction in hydrocarbon and carbon monoxide emissions can be achieved though the implementation of such ground controls at the two northern Virginia airports. Such a reduction would represent a 1.7 ton reduction in the area's hydrocarbon emissions and 28 ton reduction in the area's carbon monoxide emissions. Virginia assumes the required measures will be fully implemented by EPA and FAA during the next four years and takes full credit for the potential emissions reductions which they believe could result from these measures.

The assumed reduction in hydrocarbon emissions is necessary for the plan to demonstrate achievement of the oxidant standards; the claimed carbon monoxide reductions are not needed for attainment of the standards.

EPA has published an Advance Notice of Proposed Rulemaking for aircraft ground controls but has not yet proposed regulations for such controls. The Agency, however, is currently funding a demonstration project with FAA to determine if safety hazards would accompany modified ground operations. If the demonstration is successful, EPA will propose and promulgate regulations for the implementation of ground operations deemed free of safety hazards.

The Agency currently believes that certain ground and taxi operations included in the demonstration can be conservatively assumed to be safe and acceptable. EPA calculations indicate that the application of these measures could result in a 24 percent reduction in hydrocarbons at National Airport and a 30 percent reduction in hydrocarbons at Dulles Airport (vice 50 percent reduction proposed by Virginia). In light of EPA's intention to work jointly with FAA to promulgate and implement ground operations deemed safe and acceptable prior to 1977, the Agency believes it is reasonable to allow Virginia to accept credit for emission reductions which will result from controlling the ground operations conservatively felt at this time to be safe and acceptable. The percent emissions reductions indicated above which

would result from these measures would provide approximately a 0.8 tons reduction in hydrocarbons for the National Capital Region. Accordingly, the Agency will accept 0.8 tons of the claimed 1.7 tons reduction as being an approvable portion of the plan based on the expected implementation of ground operation regulations.

#### ECONOMIC AND SOCIAL IMPACT

The social and economic consequences of the measures included in the Virginia plan or proposed herein are considered reasonable. For example, the inspection and maintenance procedures will require expenses of approximately \$10 annually for the average vehicle inspected. The implementation of the VSAD retrofit program of pre-1968 vehicles will require that individual motorists pay approximately \$20 installation costs. Though the price to the fleet vehicle owner for the catalytic retrofit is \$135 per vehicle, this cost could gradually be reclaimed through slightly higher service or use fees for the fleet vehicles controlled. In addition, such expenditure can be deducted from income tax as a business expense, and therefore part of the cost will be absorbed by the government. Compensation for the expenditures associated with the modifications required by the gasoline handling regulations could similarly be gained through slight increase in the fees for station services or fuel prices. This also could be deducted as a business expense from the income tax. Distributed costs of the various mass transportation improvement measures, as well as the incentives for the use of express buses and carpools and disincentives on the use of automobiles by individual motorist-commuters, are also considered reasonable.

The measures providing transportation improvements are expected to benefit the public from the standpoint of improved traffic flow for commuters, general urban mobility, and energy consumption. The resulting VMT reductions may also have some impact on the sprawling development patterns fostered by widespread automobile use which are unduly wasteful of energy, land and other

resources and have contributed to the decay of urban centers.

#### PUBLIC COMMENTS SOLICITED

Although the Administrator has concluded that the proposed plan is the best approach available to him at the present time for achieving compliance with the requirements of the Act, further analysis may demonstrate that more appropriate options are available. He therefore desires to obtain the comments and suggestions of the public on the problems of achieving the ambient air quality standards in the Virginia portion of the National Capital Interstate Air Quality Control Region. Comments are particularly invited pertaining to measures that may be taken by Federal, State, or local authorities to support or supplement the proposed air pollution control strategy, to implement these measures, and to compare social and economic effects of alternative pollution control measures.

Public hearings will be held at the Holiday Inn, Jefferson Plaza, 1489 Jefferson Davis Highway, Arlington, Virginia, on September 4, 1973, beginning at 9:00 a.m. Notice of the hearing on these regulations (including designation of locations for inspection and distribution of EPA proposals) is being published in the Virginia portion of the National Capital Interstate Air Quality Control Region.

The Administrator's final promulgation of transportation controls for the Virginia portion of the National Capital Interstate Region will consider the comments and testimony he receives, as well as any additional approvable strategies submitted by the Commonwealth as part of the Commonwealth plan before or at the hearing. These influences, and the additional analysis of alternative strategies that can be made in the time between this proposal and final promulgation, may lead the Administrator to adopt final regulations that differ in important ways from this proposal.

## SUBMITTAL OF WRITTEN COMMENTS

Interested persons may participate in this rulemaking by submitting written comments, preferably in triplicate, to EPA ATTN: Mobile Source Enforcement Division, 401 M Street, SW., Washington, D.C. 20460. All relevant comments received no later than September 4, 1973 will be considered. Receipt of comments will be acknowledged but substantive responses to individual comments will not be provided. Comments received will be available for public inspection during normal business hours at the Office of Public Affairs, EPA, 401 M Street, SW., Washington, D.C. 20460. This notice of proposed rulemaking is issued under the authority of section 110(c) and 301(a) of the Clean Air Act (42 U.S.C. 1857 et seq.).

## EPA STUDIES AND GUIDELINES

Further information on transportation control, land use, and motor vehicle emissions may be obtained from one or more of the following documents which the Environmental Protection Agency has published:

a. "Prediction of the Effects of Transportation Controls on Air Quality in Major Metropolitan Areas" and "Evaluating Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas," November 1972. Both of these documents are generally known as the "Six Cities Study."

b. "Transportation Controls to Reduce Motor Vehicle Emissions in Major Metropolitan Areas," December 1972. This document is a summary of a study of 14 cities conducted with the view of recommending specific transportation control strategies. (Separate reports for each of the 14 cities are also available.)

NOTE: The documents listed in a and b above are available from the Air Pollution Technical Information Center, EPA, Research Triangle Park, North Carolina 27711.

c. "Control Strategies for In-Use Vehicles," November 1972. This report is available from EPA, Mobile Source

Pollution Control Programs, 401 M Street, SW., Washington, D.C. 20460.

d. "Transportation Control Measures," FEDERAL REGISTER (38 FR 15194) June 8, 1973.

e. "Aircraft and Aircraft Engines," FEDERAL REGISTER (37 FR 26488) December 12, 1972.

f. "Aircraft Emissions: Impact on Air Quality and Feasibility of Control." This report presents the available information on the present and predicted nature and extent of air pollution related to aircraft operations in the United States. In addition, it presents an investigation of the present and future technological feasibility of controlling such emissions.

(42 U.S.C. 1857 et seq.)

Dated: July 24, 1973.

ROBERT W. FRI,  
*Acting Administrator.*

It is proposed to amend Part 52 of Chapter I of Title 40 of the Code of Federal Regulations by adding the following:

**§ 52.2435 Reduction of employee parking.**

**(a) Definitions:**

(1) **Governmental Entity**—means a federal, state or local department, agency [sic] bureau, board, office, commission, district, or unit or any other type (excluding foreign embassies) which employs personnel paid wholly with public funds.

(2) **Commercial Parking Rate**—means the average rate charged by commercial parking facilities (excluding on-street parking meters) on a monthly basis within a 1 mile radius of a facility or installation covered by this section.

(3) **Served by Public Transit**—means that such transit is available during working hours within a reasonable walking distance of the employee's place of employment,

even though such transit may not serve the area of the employee's residence.

(4) State Agency means Commonwealth of Virginia, State Air Pollution Control Board.

(b) This section shall be applicable in the Commonwealth of Virginia portion of the National Capital Interstate Air Quality Control Region.

(c) (1) All facilities or installations owned, operated or leased by the federal government which control, operate or lease a parking facility containing 25 or more spaces, shall by January 1, 1974, report to the Administrator the number of parking spaces in each such facility as of October 15, 1973. This number shall not include residential (including barracks) parking spaces contained in or on the facility or installation.

(2) The chief administrative officer of all facilities or installations subject to paragraph (c) (1) of this section, shall by April 1, 1974, submit to the Administrator a detailed report specifying the level of public transit service to the facility and also the parking space utilization at the facilities or installations under his or her control at that time. This report shall include but is not limited to:

(i) All public transit lines which have stops within one-half mile of any such installation or facility.

(ii) The practicality of the operation of shuttle service from presently well serviced locations such as (Rosslyn, Crystal City) to the facility or installation during morning and afternoon peak hours.

(iii) A summary of the existing parking situation of the facility including:

(a) Average vehicle occupancy calculated from a visual survey of vehicles entering and leaving the facility over a full week's time.

(b) The percentage of vehicles with one, two, three and four occupants.

(c) The total number of vehicles using the facility daily. Should the report state that the facility or installation is not presently served by public transit, this report shall be reexamined, updated, and submitted annually not later than April 1 of each successive year.

(d) (1) All facilities or installations owned, operated, or leased by state and local governments which control, operate or lease a parking facility containing 25 or more spaces, shall by January 1, 1974, report to the State Agency the number of parking spaces in each such facility as of October 15, 1973. This number shall not include residential parking spaces contained in or on the facility or installation or publicly owned commercial type parking facilities.

(2) The chief administrative officer of all facilities or installations, subject to paragraph (d) (1) of this section, shall by April 1, 1974, submit to the Commonwealth of Virginia, State Air Pollution Control Board, a detailed report specifying whether the facilities or installations under his or her control are served by public transit at that time. This report shall include, but is not limited to:

(i) All public transit lines which have stops within one-half mile of any such installation or facility.

(ii) The practicality of the operation of shuttle service from presently well serviced locations such as Rosslyn, Crystal City to the facility or installation during morning and afternoon peak hours.

(iii) A summary of the existing parking situation at the facility including:

(a) average vehicle occupancy calculated from a visual survey of vehicles entering and leaving the facility over a full week's time.

(b) The percentage of vehicles with one, two, three and four occupants.

(c) The total number of vehicles using the facility daily.

Should the report state that the facility or installation is not presently served by public transit, this report shall be reexamined, updated and submitted annually, not later than April 1 of each successive year.

(e) Each governmental entity subject to paragraphs (c) (1) and (d) (1) of this section and which in the opinion of the Administrator or State Agency is served by public transit shall comply with either subparagraphs

(1) or (2) of this paragraph. This governmental entity shall either:

(1) Adopt a plan whereby a charge equivalent to commercial parking rates will be imposed for parking at any such parking facility owned, operated or leased by the governmental entity. In no case shall the charge be less than \$20.00 per space month. Any funds collected by any governmental entity under this subparagraph may be used for any legitimate governmental purpose, *provided, however,* That no such funds shall be used to subsidize directly or indirectly employee parking; or

(2) Adopt a plan to reduce the number of parking spaces in each such facility from the number in existence on October 15, 1973, according to the following:

- (i) By November 30, 1974, a reduction of 4 percent;
- (ii) By February 28, 1975, a reduction of 8 percent;
- (iii) By May 31, 1975, a reduction of 12 percent.

(f) (1) Each entity of the Federal government subject to paragraph (e) of this section shall submit to the Administrator no later than June 30, 1974, a detailed compliance schedule showing steps it will take to achieve either the required reduction of spaces, or the initiation of commercial parking rates. In the case of a reduction of spaces, the schedule shall include provisions for marking those spaces to be eliminated in a manner obvious to members of the public (painting over, roping off, etc.). In the case of the initiation of commercial parking rates the schedule shall include:

- (i) A date for the initial imposition of the charge. Such date shall be no later than January 1, 1975.
- (ii) The amount to be charged per space per month.
- (iii) Any exceptions to the charge (e.g., handicapped personnel, certain high level officials of the governmental entity), including documentation of the need and rationale for such exceptions.
- (iv) Provisions for annual reevaluation of the amount charged per space per month based upon any changes in commercial parking rates.

(2) Each entity of a State or local government subject to paragraph (e) of this section shall submit to the State Agency no later than June 30, 1974, a detailed compliance schedule showing steps it will take to achieve either the required reduction of spaces or the initiation of commercial parking rates.

In the case of a reduction of spaces, the schedule shall include provisions for marking those spaces to be eliminated in a manner obvious to members of the public (painting over, roping off, etc.). In the case of the initiation of commercial parking rates, the schedule shall include:

- (i) A date for the initial imposition of the charge. Such date shall be no later than January 1, 1975.
- (ii) The amount to be charged per space per month.
- (iii) Any exceptions to the charge (e.g., handicapped personnel, certain high level officials of the governmental entity), including documentation of the need and rationale for such exceptions.
- (iv) Provisions for annual reevaluation of the amount charged per space per month based upon any changes in commercial parking rates.

(g) Failure to submit any report or compliance schedule as required by this section shall render the person so failing in violation of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. Any governmental entity which either allows vehicles to be parked in excess of the number allowable, or which fails to collect commercial parking charges shall likewise be in violation and subject to enforcement.

#### § 52.2436 Vacuum spark advance disconnect.

(a) For purposes of this section, "vacuum spark advance disconnect" means a device or system installed on the vehicle which prevents the ignition vacuum advance from operating either when the vehicle's transmission is in the lower gears or when the vehicle is traveling below a predetermined speed.

(b) This section is applicable in the Commonwealth of Virginia portion of the National Capital Interstate Air Quality Control Region.

(c) On or before January 1, 1975, all gasoline-powered light duty vehicles of model year [sic] prior to 1968 and subject under presently existing legal requirements to registration in the area described in paragraph (b) of this section shall be equipped with an appropriate vacuum spark advance disconnect device.

(d) The Commonwealth of Virginia shall submit, no later than January 1, 1974, a detailed compliance schedule showing the steps it will take to implement and enforce this requirement. Such schedule shall include, as a minimum, the following:

(1) A date by which the Commonwealth of Virginia will evaluate and approve devices for use in this program. Such date shall be no later than March 1, 1974.

(2) A date by which installation of this equipment shall commence. Such date shall be no later than June 1, 1974.

(3) A date by which all vehicles subject to this section will be equipped with such devices. Such date shall be no later than January 1, 1975.

(4) Designation of any agency or agencies responsible for evaluating and approving such devices for use on vehicles subject to this section.

(5) Designation of an agency or agencies responsible for ensuring that the prohibitions of paragraph (e) (2) of this section shall be enforced.

(6) Method and proposed procedures for ensuring that those persons installing the devices have the training and ability to perform the needed tasks satisfactorily and that an adequate supply of devices will be available.

(7) Provision (apart from the requirements of any program for periodic inspection and maintenance of vehicles generally) for emission testing at the time of device installation or some other positive assurance that the device is installed and operating correctly.

(e) After January 1, 1975, the following shall apply within the Commonwealth of Virginia portion of the

#### National Capital Interstate Air Quality Control Region.

(1) The Commonwealth of Virginia shall not register a vehicle subject to this paragraph which is not equipped in accordance with paragraph (c) of this section.

(2) No owner of a light duty vehicle subject to this paragraph shall operate or allow the operation of any such vehicle that is not equipped in accordance with paragraph (c) of this section.

(f) The failure of any person to comply with any provision of this section shall render such person in violation of a requirement of an applicable implementation plan, and subject to enforcement action under section 113 of the Clean Air Act. As to compliance schedules, the Commonwealth of Virginia will be considered to have failed to comply with the requirements of this regulation if it fails to submit on a timely basis the required compliance schedule, and or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

#### § 52.2437 Oxidizing catalyst retrofit.

##### (a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of the vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbon and carbon monoxide from that vehicle.

(2) Fleet vehicle means any of 5 or more light duty vehicles operated by the same person(s), business, or governmental entity and used principally in connection with the same or related occupations or uses. This definition shall also include any taxicab (or other light duty gasoline-powered vehicle-for-hire) owned by any individual or business.

(3) Governmental entity means any agency of the executive branch of the Federal government, or a state or local department, agency, bureau, board, office, commission, district, or unit of any other type (excluding foreign embassies) which employs personnel paid wholly with public funds.

(4) All other items used in this section which are defined in 40 CFR Part 51, Appendix N, are used herein with the meanings so defined.

(b) (1) This section is applicable in the Commonwealth of Virginia portion of the National Capital Interstate Air Quality Control Region.

(2) Classes of Vehicles Covered.

(i) Light duty fleet vehicles of model year 1971 through 1975, not already equipped with catalysts, or certified to meet original 1975 statutory light duty vehicle emission standards.

(c) The Commonwealth of Virginia shall establish a retrofit program to insure that or before May 31, 1977, classes of gasoline-powered light duty vehicles as specified in paragraph (b) (2) of this section, which are subject under presently existing legal requirements to registration in the area defined in paragraph (b) of this section above and are used on the streets and highways of the Commonwealth, are equipped with an appropriate oxidizing catalyst retrofit device. No later than March 1, 1974, the Commonwealth of Virginia shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use on motor vehicles subject to this section.

(2) Designation of an agency responsible for ensuring that the provisions of paragraph (c) (3) of this section are enforced.

(3) A provision that starting no later than May 31, 1976, the Commonwealth of Virginia shall commence retrofitting oxidizing catalysts to those light duty motor vehicles able to operate properly on unleaded 91 RON gasoline. The installation shall be completed by May 31, 1977.

(4) A method and proposed procedure for ensuring that those installing the retrofits have the training and ability to perform the needed tasks satisfactorily and that they will have an adequate supply of retrofit components.

(d) After May 31, 1977, the Commonwealth shall not register or allow to operate on public streets or highways any light duty gasoline-powered vehicle specified in paragraph (b) (2) of this section which does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After May 31, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicles which does not comply with the applicable standards and procedures implementing this section.

(f) The Commonwealth of Virginia shall submit, no later than October 1, 1973, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section, and the text of needed statutory proposals and needed regulations which it will propose for adoption. The compliance schedule shall include a date by which the Commonwealth shall evaluate and approve devices for use in this program. Such date shall be no later than September 30, 1975.

(g) Failure to comply with any provisions of this section shall render the person so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement under section 113 of the Clean Air Act. The Commonwealth will be considered to have failed to comply with the requirements of this regulation if it fails to submit on time the required compliance schedule, or if the compliance schedule when submitted does not contain in satisfactory form each of the elements it is required to contain.

**§ 52.2438 Control of evaporative losses from the filling of vehicular tanks.**

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the Commonwealth of Virginia portion of the National Capital Interstate Air Quality Control Region.

(c) A person shall not transfer gasoline to an automotive fuel tank from gasoline dispensing systems unless the transfer is made through a fill nozzle designed to:

(1) Effect a vapor-tight fit between the fill nozzle and filler neck of the automotive fuel tank so as to prevent discharge of hydrocarbon vapors to the atmosphere.

(2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 90 percent by weight of the organic compounds in displaced vapors are recovered.

(3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.

(d) The system referred to in paragraph (c) of this section can consist of a vapor-tight vapor return line from the fill nozzle filler neck interface to the dispensing tank or to an adsorption, absorption, incineration, or refrigeration-condensation system or equivalent.

(e) Components of the systems required by § 52.2439 paragraph (c) can be used for compliance with paragraph (c) of this section.

(f) If demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of fill neck configuration, location, or other design features, the provisions of this paragraph shall not apply to tanks or vehicles existing at the time of promulgation of this regulation.

(g) The Commonwealth of Virginia shall divide all facilities subject to this section into three classes, the first of which shall equal approximately 70 percent of hydrocarbon emissions from all gasoline stations, the second and third classes shall each equal approximately 15 percent of total hydrocarbon emissions from these sources. The classes shall be known as Class I, Class II, and Class III.

(h) Except as provided in paragraph (k) of this section, the owner or operator of a source included in Class I shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1974.

(2) Initiation of on-site construction or installation of emission control equipment or process change must begin not later than July 31, 1974.

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1975.

(4) Final compliance is to be achieved not later than May 31, 1976.

(5) Any owner or operator of stationary sources, subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(i) The owner or operator of a source included in the Class II shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of components parts to accomplish emission control or process modification not later than March 31, 1975.

(2) Initiation of on-site construction or installation of emissions control equipment or process change must begin not later than July 31, 1975.

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1976.

(4) Final compliance is to be achieved not later than May 31, 1976.

(5) Any owner or operator of stationary sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(j) The owner or operator of a source included in Class III shall comply with the increments contained in the following compliance schedule:

(1) Contracts for emission control systems or process modifications must be awarded or orders must be issued for the purchase of component parts to accomplish emission control or process modification not later than March 31, 1975.

(2) Initiation of on-site construction or installation of emissions control equipment or process change must begin not later than July 31, 1976.

(3) On-site construction or installation of emission control equipment or process modification must be completed not later than March 31, 1977.

(4) Final compliance is to be achieved not later than May 31, 1977.

(5) Any owner or operator of stationary sources, subject to compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(k) Paragraph [sic] (h) and (i) of this section shall not apply:

(1) To a source which is presently in compliance with paragraph (c) of this section and which has certified such compliance to the Administrator by December 31, 1973. The Administrator may request whatever information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the Commonwealth and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by December 31, 1973, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1975, in the case of Class I sources, and May 31, 1976, in the case of Class II sources. If promulgated by the Administrator, such schedule shall satisfy the requirements of this paragraph for the affected source.

(1) [sic] Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (b) of this section fails to satisfy the requirements of § 51.15(b) and (c) of this chapter.

#### § 52.2439 Gasoline transfer vapor control.

(a) The term "gasoline" means any petroleum distillate having a Reid vapor pressure of four (4) pounds or greater.

(b) This section is applicable in the Commonwealth of Virginia portion of the National Capital Interstate Air Quality Control Region.

(c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless such container is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location.

(1) The vapor recovery portion of the system shall include one or more of the following:

(i) A vapor-tight vapor return line from the storage container to the delivery vessel and a device that will ensure that the vapor return line is connected before gasoline can be transferred into the container.

(ii) Refrigeration-condensation system or equivalent designed to recover no less than 90 percent by weight of the organic compounds in the displaced vapor.

(2) The vapor-laden delivery vessel shall be subject to the following conditions:

(i) The delivery vessel must be so designed and maintained as to be vapor-tight at all times.

(ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with a vapor recovery system or the equivalent, which can recover at least 90 percent by weight of the organic compounds in the vapor displaced from the delivery vessel during refilling.

(d) The provisions of paragraph (c) of this section shall not apply to the following:

(1) Stationary containers having a capacity less than 550 gallons used exclusively for the fueling of implements of husbandry; provided, however, said containers are equipped with submerged fill pipes.

(2) Any container having a capacity less than 2,000 gallons installed prior to promulgation of this paragraph.

(3) Transfer made to storage tanks equipped with floating roofs or their equivalent.

(e) Compliance schedule: Except as provided in paragraph (f) of this section, the owner or operator of any source subject to this section shall comply with this section on or before January 31, 1974.

(1) Any owner or operator in compliance with this section on the effective date of this regulation shall certify such compliance to the Administrator no later than 120 days following the effective date of this section.

(2) Any owner or operator who achieves compliance with this section after the effective date of this section shall certify such compliance to the Administrator within 5 days of the date compliance is achieved.

(f) Any owner or operator of a source subject to paragraph (e) of this section may, not later than 120 days following the effective date of this section, submit to the Administrator for approval a proposed compliance schedule that demonstrates compliance with the provisions specified in paragraph (e) of this section as expeditiously as practicable but no later than June 30, 1975. The compliance schedule shall provide for increments of progress toward compliance. The dates for achievement of such increments of progress shall be specified. Increments of progress shall include, but not be limited to: Submittal of final control plan to the Administrator; letting of necessary contracts for construction or process changes or issuance of orders for the purchase of component parts to accomplish emission control or process modification; initiation of on-site construction or installation of emission control equipment or process modification; completion of on-site construc-

tion or installation of emission control equipment or process modification; and final compliance.

(g) Any owner or operator who submits a compliance schedule pursuant to this paragraph shall, within 5 days after the deadline for each increment of progress, certify to the Administrator whether or not the required increment of the approved compliance schedule has been met.

#### § 52.2440 Control of hydrocarbon emissions from effluent oil-water separators.

(a) This section is applicable in the Virginia Portion of the National Capital Interstate Air Quality Control Region.

(b) After December 30, 1973, a person shall not use any compartment of any vessel or device operated for the recovery of oil from effluent water which recovers 200 gallons a day or more of any petroleum products from any equipment which processes, refines, stores or handles hydrocarbons with a vapor pressure of 1.5 pounds per square inch absolute or greater under actual storage conditions unless such compartment is equipped with one of the following vapor loss control devices, except when gauging or sampling is taking place:

(1) A solid cover with all openings sealed and totally enclosing the liquid contents of that compartment.

(2) A floating pontoon or double-deck type cover, equipped with closure seals to enclose any space between the cover's edge and compartment wall.

(3) A vapor recovery system, which reduces the emission of all hydrocarbon vapors and gases into the atmosphere by at least 90 percent by weight.

(4) Other equipment of an efficiency equal to or greater than 1, 2, or 3 if approved by the Administrator.

This section shall not apply to any oil-effluent water separator used exclusively in conjunction with the production of crude oil if the water fraction of the oil-water effluent entering the separator contains less than 5 parts per million hydrogen sulfide, organic sulfides, or a combination thereof.

**§ 52.2441 Peak hour delivery ban regulation.**

(a) Definitions:

(1) *Peak Hours.* The hours 6:00 a.m. to 9:30 a.m. Monday through Saturday.

(2) *Delivery Ban.* A program to reduce emissions from in-use heavy duty gasoline powered vehicles employed to deliver goods within the specified peak hours.

(3) *Heavy Duty Gasoline Powered Vehicle.* Any motor vehicle either designated primarily for transportation of property and rated more than 6,000 pounds GVW and which is powered by a gasoline burning engine. This shall not include mail trucks, and emergency type vehicles such as fire trucks and police wagons.

(4) All other terms used in this section which are defined in 40 CFR Part 51, Appendix N are used herein with the meaning so defined.

(b) This regulation is applicable in the Commonwealth of Virginia portion of the National Capital Interstate Air Quality Control Region.

(c) The Commonwealth of Virginia counties of Arlington, Fairfax, Loudoun and all incorporated cities located within such county shall establish a peak hour, heavy duty gasoline powered vehicle use prohibition on streets and highways over which each entity has ownership and control. No later than February 1, 1974, each governmental entity shall submit to the Administrator a legally enforceable program which shall include:

(1) provisions for initiation of the ban no later than June 30, 1974.

(2) the prohibition shall state that heavy duty gasoline powered vehicles making deliveries in violation of the prohibition shall either be towed away, or the owner and/or operator subject to a fine of up to \$100, or both.

(d) The Commonwealth of Virginia, counties and all incorporated cities within such counties subject to this section shall submit, no later than February 1, 1974, a detailed compliance schedule showing the steps it will take to establish and enforce a peak hour delivery ban. The compliance schedule shall include the date by which

the jurisdictions will recommend needed regulations to the appropriate body, and will identify the state, county, or city official responsible for enforcement.

(e) Failure to comply with any provisions of this regulation shall render such person in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. A state or other governmental entity will be considered to have failed to comply with the requirements of this section if it fails to timely submit any required compliance schedule.

**§ 52.2442 Limitation of off-street parking.**

(a) This section shall apply only in the event that the Administrator finds that the Commonwealth of Virginia fails to take one or more of the following steps to implement the \$2.00 surcharge (or an equivalent measure):

(1) Complete study identifying locations where surcharge or equivalent measure shall apply and submit to the Administrator by May 30, 1974.

(2) Submit to the Administrator legally adopted regulations of the Commonwealth of Virginia or other governmental entities to collect the surcharge or impose the equivalent measure by June 30, 1974.

(3) Institute the collection of the surcharge or impose the equivalent measure in those areas identified in the study by April 1, 1975.

(b) In the event the Commonwealth of Virginia chooses to adopt any "equivalent measure" to this surcharge, the Commonwealth of Virginia must submit to the Administrator by December 31, 1973, information demonstrating that such measure will in fact achieve the required result. Failure to demonstrate this fact adequately will cause the Administrator to determine that the Commonwealth of Virginia is failing to implement the surcharge.

(c) In the event that the Administrator determines that the Commonwealth of Virginia is failing to implement the \$2.00 surcharge (or an equivalent measure)

he shall make this determination public in the FEDERAL REGISTER, and this section shall then be immediately effective.

(d) Definition:

(1) The term "off-street parking facility" means any land or building or portion of a building set aside for the purpose of storing a maximum capacity of 10 or more vehicles on a temporary basis.

(e) Each governmental entity, public agency, private corporation, partnership or sole proprietor owning or operating an off-street parking facility located within the Commonwealth of Virginia portion of the National Capital Interstate Air Quality Control Region shall, within 30 days of the effective date of this regulation, report to the Administrator the number of parking spaces in each such facility under its ownership or control [as] of the effective date of this regulation. The number used solely for the storage of vehicles of persons who reside within  $\frac{1}{4}$  mile of the facility shall not be counted.

(f) Each such owner or operator of any off-street parking facility located within the area specified in paragraph (c) of this section shall reduce the number of affected parking spaces in each such facility from the number in existence as of the date this regulation becomes effective according to the following schedule:

(1) Within 90 days of the effective date—a 5 percent reduction;

(2) Within 120 days of the effective date—a 10 percent reduction;

(3) Within 180 days of the effective date—a 15 percent reduction;

(g) Each such owner or operator of an off-street parking facility subject to the requirements of this section shall submit to the Administrator, no later than 60 days after the effective date of this section, a detailed compliance schedule showing the steps it will take to achieve the required reduction in parking spaces. Such schedule shall provide for the marking in some manner obvious to the public (such as painting over, roping off, or the

like) of the eliminated spaces on which parking is not permitted pursuant to this section.

(h) Failure to submit a compliance schedule as required by this section shall render the person or governmental entity so failing in violation of a requirement of an applicable implementation plan and subject to enforcement action under section 113 of the Clean Air Act. Any owner or operator of an off-street parking facility who allows any vehicle to be parked on any parking space which has been eliminated pursuant to this section, or who fails to mark clearly those spaces which have been eliminated, shall likewise be in violation and subject to enforcement.

§ 52.2443 Management of parking supply.

(a) This section shall apply only in the event that the Administrator finds that the Commonwealth of Virginia fails to take one or more of the following steps to implement the \$2.00 surcharge (or an equivalent measure):

(1) Complete study identifying locations where surcharge or equivalent measure shall apply and submit to the Administrator by May 30, 1974.

(2) Submit to the Administrator legally adopted regulations of the Commonwealth of Virginia or other governmental entities to collect the surcharge or impose the equivalent measure by June 30, 1974.

(3) Institute the collection of the surcharge or impose the equivalent measures in those areas identified in the study by April 1, 1975.

(b) In the event the Commonwealth of Virginia chooses to adopt any "equivalent measure" to this surcharge, the Commonwealth of Virginia must submit to the Administrator by December 31, 1973, information demonstrating that such measure will in fact achieve the required result. Failure to demonstrate this fact adequately will cause the Administrator to determine that the Commonwealth of Virginia is failing to implement the surcharge.

(c) In the event that the Administrator determines that the Commonwealth of Virginia is failing to implement the \$2.00 surcharge (or an equivalent measure) he shall make this determination public in the FEDERAL REGISTER, and this section shall then be immediately effective.

(d) Definitions:

(1) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land to use as a parking facility.

(2) "Modification" means any change to a parking facility which increases the vehicle capacity of such facility.

(3) "Enlargement" means any physical change or addition to a parking facility which increases the vehicle capacity of such facility.

(4) "Commenced" means that an owner or operator has undertaken a continuous program of construction, modification, or enlargement.

(5) "Parking facility" (also called "facility") means any facility, building, structure, or lot or portion thereof used primarily for temporary storage of motor vehicles.

(e) No person, after the effective date of this section, shall commence construction of any new parking facility or modification or enlargement of any existing parking facility until he has first received from the Administrator or from an agency approved by the Administrator a permit stating the construction, modification or enlargement of such facility will not interfere with the attainment or maintenance of applicable Federal air quality standards.

(f) In order for any agency to be approved by the Administrator for purposes of issuing permits for construction of any new parking facility or any modification or enlargement of any existing parking facility, such agency shall demonstrate to the satisfaction of the Administrator that:

(1) Requirements for permit applications and issuance have been established. Such requirements shall include, but not be limited to, a requirement that before a permit may be issued, the following findings of fact or factually supported projections must be made:

(i) The location of the facility.  
(ii) The total motor vehicle capacity before and after the construction, modification, or enlargement of the facility.

(iii) The normal hours of operation of the facility and the enterprises and activities which it serves.

(iv) The number of people using or engaging in any enterprises or activities which the facility will serve.

(v) The number of motor vehicles using the facility on an average hourly basis and a peak hour basis.

(vi) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projections shall include data concerning the availability of public transit from such areas.

(2) Criteria for issuance of permits have been established and published. Such criteria shall include, but shall not be limited to:

(i) Full consideration of all facts contained in the application.

(ii) Provisions that no permit shall be issued if such permit will result in the increase of VMT within any area, the air quality of which fails to meet applicable Federal air quality standards.

(3) Agency procedures provide that no permit for the construction, enlargement or modification of a parking facility covered by this section shall be issued without notice and opportunity for public hearing. The public hearing may be of the legislative type[;] the notice shall conform to the requirements of 40 CFR Part 51.4(b); and the Agency rules of procedure may provide that if no notice of intent to participate in the hearing is received from any member of the public (other than the applicant) prior to 7 days before the scheduled hearing date, no hearing need be held. Such a requirement, if imposed, shall be noted prominently in the required notice of hearing.

## Title 40—Protection of Environment

CHAPTER I—ENVIRONMENTAL  
PROTECTION AGENCY

## SUBCHAPTER C—AIR PROGRAMS

PART 52—APPROVAL AND PROMULGATION OF  
IMPLEMENTATION PLANS

## Transportation and Land Use Controls

On April 30, 1971, pursuant to section 109 of the Clean Air Act (42 U.S.C. 1857c-4), the Administrator promulgated national primary and secondary ambient air quality standards for six pollutants (40 CFR Part 50). The Act requires that the primary standards protect the public health with an adequate margin of safety and that the secondary standards protect the public welfare from any known or anticipated adverse effects. Under section 110 of the Act (42 U.S.C. 1857c-5), States were required to prepare and submit to the Administrator plans for implementing the national ambient air standards in each air quality control region in the State. The Administrator published on May 31, 1972, (37 FR 10842, 40 CFR Part 52) his initial approvals and disapprovals of State implementation plans developed and submitted under this provision of Federal law.<sup>1</sup>

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<sup>1</sup> Other approval and disapproval actions have been published as follows: July 27, 1972 (37 FR 15080), August 11, 1972 (37 FR 16177), September 22, 1972 (37 FR 19806), September 26, 1972 (37 FR 20117), October 28, 1972 (37 FR 23085), November 9, 1972 (37 FR 23836), February 8, 1973 (38 FR 3599), March 8, 1973 (38 FR 6279), March 20, 1973 (38 FRA [sic] 7323), March 23, 1973 (38 FR 7554), April 10, 1973 (38 FR 9088), May 14, 1973 (38 FR 7323), March 23, 1973 (38 FR 12920), May 23, 1973 (38 FR 13561), June 5, 1973 (38 FR 14752), June 15, 1973 (38 FR 15722), June 22, 1973 (38 FR 16550), [sic] primarily transportation controls), June 22, 1973 (38 FR 16351), July 3, 1973 (38 FR 17726), July 13, 1973 (38 FR 18652), July 16, 1973 (38 FR 18878), August 3, 1973 (38 FR 20835), August 14, 1973 (38 FR 20835), August 14, 1973 (38 FR 21918), and August 21, 1973 (38 FR 22473).

The presence in the ambient air of three of the pollutants for which control strategies were required to be submitted by States—carbon monoxide, hydrocarbons, and photochemical oxidants—is largely attributable to motor vehicles; consequently many States were unable to formulate and submit adequate control strategies that utilized only limitations on emissions from stationary sources. However, as the Administrator noted in his May 31 approval/disapproval of implementation plans, neither the States nor the Environmental Protection Agency had any practical experience that would permit the development of meaningful transportation control plans or the prediction of their impact on air quality. In this context, "transportation control plan" is defined as the summation of individual actions (transportation controls measures) that will, when taken collectively, reduce concentrations of carbon monoxide and photochemical oxidants in the atmosphere from those achieved by the stationary source control program and the Federal motor vehicle control program (FMVCP) to the level prescribed by the National Ambient Air Quality Standards. States were advised in August 1971 (36 FR 15486) that adoption of transportation control plans could be deferred beyond the statutory deadline for submittal of implementation plans but that the submitted plans would have to define the degree of emission reduction to be achieved through transportation control measures and identify the measures being considered. Transportation control plans were to be designed to augment the existing state implementation plan and the FMVCP. States were required to submit adopted transportation control plans no later than February 15, 1973.

Many States requested 2-year extensions pursuant to section 110(e) of the Act (42 U.S.C. 1857-5(e)) for the attainment of the primary standards for the three pollutants based on the unavailability of transportation control measures. The Administrator determined that, in fact, transportation control measures would not be available soon enough to permit attainment of the primary standards within the 3-year time period prescribed

by the Act; therefore, 2-year extensions were granted at the request of those States that had determined that transportation control measures would be necessary. In some cases, this meant that States were required to submit on February 15, 1973 transportation and/or land-use control measures that would achieve the standards by 1977. In other cases, the 2-year extension meant that certain States would not have to submit transportation control measures because the FMVCP and/or stationary source control would be adequate to achieve the standards by 1977 without the application of any other transportation and/or land use measures. In order to assist the States in the development of transportation control plans, the Environmental Protection Agency conducted numerous studies and made the results available to the States. In addition, contract assistance was provided in developing the plans for 14 of the affected regions, and the reports of these studies were made available to all the States.

On January 31, 1973, the U.S. Court of Appeals for the District of Columbia Circuit decided the case of "National Resources Defense Council Inc., et al. v. Environmental Protection Agency" 475 F.2d 968 (1973) and seven related cases, hereafter referred to as NRDC v. EPA. The court order held that the Clean Air Act did not permit the delay in submission of transportation control portions of State implementation plans until February 15, 1973, or permit the granting of extensions to mid-1977 for attainment of the national primary air standards where plans had not been submitted. The order required the Administrator to formally rescind through notice to the States and publication in the FEDERAL REGISTER the extension of time granted for submission of transportation and/or land-use control portions of implementation plans. It also required the Administrator to formally rescind in the same manner the extension granted to several States to delay implementation of their plans or portions thereof until May 31, 1977. The court further ordered the Administrator to inform the States concerned that all States that have not

yet submitted an implementation plan fully complying with the requirements of the Clean Air Act of 1970 must submit such a plan by April 15, 1973. That plan must satisfy each and every requirement of section 110 (a) (2) (A)-(H) if it is to be approved by the Administrator.

In accordance with this order, 22 States including the District of Columbia were notified by telegram on February 5, 1973, that any extensions granted because of the unavailability of transportation and/or land-use controls were canceled and that plans for the attainment and maintenance of the standards for the three pollutants would be required by April 15, 1973. A FEDERAL REGISTER notice was issued on March 20, 1973, (38 FR 7323), to complete the requirements of that court order by specifically amending the provisions of this part with regard to each of the States concerned. These amendments provided that every State granted an extension to achieve those primary standards and/or permitted to defer submittal of the transportation and/or land-use control strategies until February 15, 1973, would be required to submit no later than April 15, 1973, transportation and/or land-use controls showing achievement of the standards by 1975. In addition to those States that were required to submit transportation and/or land-use control strategies on February 15, 1973, a number of other States, which had regions that would not achieve the standard by 1975 but which had not been required to submit transportation control strategies because the FMVCP was capable of achieving the standards by 1977, were required to submit transportation control strategies on April 15, 1973. States that were not granted an extension but which had deficient plans were also required to submit transportation control strategies on April 15, 1973. Strategies adopted by the States must provide for attainment and maintenance of these standards by May 31, 1975. At the time of submission of these plans on April 15, 1973, the Governors of the States could request an extension up to 2 years for compliance with the provisions of these plans if the specific requirements of section 110(e) are satisfied by the State plan.

By June 15, 1973, 16 States including the District of Columbia had submitted transportation control plans. These plans were reviewed by the Environmental Protection Agency and were made available for public review and comment, including public hearings held by the States. Comments were received from the general public, other Federal agencies, public interest groups, industrial and business groups, and others. Based upon the comments received and the Agency's evaluation of the plans in light of pertinent legal requirements, the Administrator announced his approval/disapproval decision on June 15, 1973.

The approval/disapproval decisions were based on a detailed evaluation of the plans submitted by the States. Criteria for this evaluation include adequacy of control plans, provisions for adoption and submission procedures, accuracy of air quality data and emission inventories, extension request considerations, provisions for air quality and source surveillance, review of legal authority, adequacy of resources, and provisions for intergovernmental cooperation.

If the Administrator disapproved a State plan or portion thereof, or if a State failed to submit an implementation plan or portion thereof, he was required under section 110(c) of the Act to propose and subsequently promulgate regulations setting forth a substitute implementation plan. If regulatory portions of a State plan, including control plans and related rules and regulations, were disapproved or were not submitted, regulations setting forth substitute portions were proposed. When disapproved portions were of a non-regulatory nature (air quality surveillance, adequacy of resources, and intergovernmental cooperation), and therefore not susceptible to correction through promulgation of regulations by the Administrator, detailed comments were included in the evaluation report; in such cases, the Environmental Protection Agency will work with the States to correct the deficiencies.

Proposals for various States were published as follows: January 22, 1973 (38 FR 2194—California);

February 7, 1973 (38 FR 3526—California); July 2, 1973 (38 FR 17682—California, Massachusetts, Minnesota, Ohio); July 3, 1973 (38 FR 17782—New Jersey, Pennsylvania, Texas); July 16, 1973 (38 FR 18938—Alaska, Arizona, California, Illinois, Utah, Washington); July 18, 1973 (38 FR 19132—California); August 1, 1973 (38 FR 20469—California); August 2, 1973 (38 FR 20752—Colorado, District of Columbia, Oregon, Maryland, Virginia); and August 3, 1973 (38 FR 20851—California, Minnesota, New Jersey, Texas).

To the extent possible, the Administrator's evaluation of State plans reflects the latest information submitted by the States. In the interest of giving the States every opportunity to bring their implementation plans into full compliance with the Act and 40 CFR Part 51, the Environmental Protection Agency has notified States that modifications submitted after the deadline for submittal of State plans would be accepted and considered provided that such modifications were made and submitted in accordance with the requirements of 40 CFR Part 51. Accordingly, many States have been, and still are, making and submitting modifications of their implementation plans.

The Act directs the Administrator to require a State to revise its implementation plan whenever he finds that it is substantially inadequate for attainment and maintenance of a national standard. In accordance with the statutory mandate, the Environmental Protection Agency will continue to evaluate the State plans and will, as necessary, call upon the States to make revisions.

#### CLEAN AIR ACT REQUIREMENTS

Section 110(a) of the Clean Air Act requires that a valid implementation plan set forth a control strategy that attains the ambient standards as expeditiously as practicable, but no later than May 31, 1975. Some of the plans promulgated will meet this date. For those that cannot, however, an extension under section 110(e) of the Act of up to 2 years may be granted, if necessary, for attaining an ambient air quality standard. To qual-

ify for any extension, a plan must demonstrate that certain elements of the necessary control strategy will not be available by 1975; that there are no earlier, unused alternatives to these delayed strategies; and that emission control measures that are, in fact, reasonably available will be applied as soon as possible.

The effect of the requirement that an extension be granted only for a chosen control measure if "the necessary technology or other alternatives are not available," if "reasonably available alternative means" of emission reduction are considered and applied, and if "interim measures of control" that the Administrator determines are "reasonable under the circumstances" are applied, is to assure that the standards are obtained (in the words of section 110(a)), "as expeditiously as practicable." In essence, if a control measure is "technologically feasible," "practicable," "available," and "reasonable \*\*\* under the circumstances," it should be part of a plan before any extension is given for other measures whose implementation in 1975 would not be technologically feasible, practicable, available, or reasonable under the circumstances. This provision of the Act applies to plans promulgated by EPA as well as to those submitted by the States. If EPA believed that such an extension would be needed for a region, the proposal to grant such extension was included in the proposed rulemaking.

Under the Clean Air Act the standards must be met by 1977 at the latest. Although both States and EPA should attempt to do this in the least costly and most practical way, the requirement of the statute is unconditional. The standards must be met by the deadline regardless of cost or technical feasibility. (A limited delay to 1978 may be allowed under § 110(f), under certain conditions.) In some regions of the country this would be possible only if substantial gasoline rationing is imposed, and the plans proposed for those regions accordingly provide for this measure in order to meet the technical requirements of the law. This does not mean, however, that the Administrator seriously desires to use such a measure.

Accordingly, it is intended to seek an amendment to the Clean Air Act for the specific purpose of allowing the Administrator to extend the attainment date and to take appropriate alternative measures for the relatively few cities that require extensive gasoline supply limitations to meet a 1977 attainment date. It should be emphasized, however, that any action by the Administrator to seek an extension beyond 1977 does not permit the delay in implementing all available control measures, even though the air quality standard will not be attained in 1977. The Administrator's intention to request additional time for attaining the standards in certain areas should in no way inhibit the rapid implementation of the feasible control measures discussed below. An additional amendment to the Act may be needed to strengthen legal authority and permit the more effective use of other measures that might better achieve long-term reductions in vehicle traffic, such as land-use planning.

#### POLLUTANT CHARACTERISTICS

Carbon monoxide is called a "primary" pollutant because it is emitted directly into the air. On the other hand, photochemical oxidant (primarily ozone) is a "secondary" pollutant; it results from the reaction of two primary pollutants (hydrocarbons and nitrogen oxides) in the presence of sunlight. As such, it differs from carbon monoxide in that the correlation between emissions of the primary pollutants and concentrations of the secondary pollutant is complex and subject to many variables. The reduction of oxidant concentrations depends upon reduction in precursor (primary pollutant) emissions, but not necessarily on a one-to-one, or linear, basis. The extent of the reduction in hydrocarbon emissions required to meet the air quality standards for oxidants, as determined by statistical evaluation of observed data, is specified in 40 CFR Part 51, Appendix J. However, the maximum measured values for the 1-hour photochemical oxidant values [sic] that can be used with the curve in Appendix J is only about 550 micrograms per

cubic meter ( $\mu\text{g}/\text{m}^3$ ) or 0.28 parts per million (ppm). Several urban areas have experienced concentrations greater than this. Another limitation of the Appendix J procedure for determining needed hydrocarbon reductions is that the data base embodied in Appendix J was derived from oxidant and total hydrocarbon areometric data taken from several large cities—namely, Los Angeles, Washington, D.C., Denver, Cincinnati, and Philadelphia. Some areas, however, are now using an approach for calculating the effect of hydrocarbons according to their differing "reactivities", rather than using total hydrocarbons as the indicator. This differing approach is currently subject to scientific debate and constantly changing knowledge. Appendix J would not necessarily be appropriate for determining the degree of selective control of reactive hydrocarbons, as an alternative to control of total hydrocarbons. As a consequence of the use of reactive hydrocarbons in certain instances, and the limitations of the Appendix J curve in others, linear rollback was used in some transportation control plans to calculate required hydrocarbon reductions. EPA is continuing to study these problems and, if strategy changes become necessary as a result of future conclusions, appropriate plan revisions will be requested or proposed.

#### TRANSPORTATION CONTROL MEASURES

Transportation control plans provide for reductions in carbon monoxide and hydrocarbon levels required beyond the reductions provided by the Federal motor vehicle emissions control program and stationary source regulations set forth in the previously approved State implementation plans. These reductions are to be accomplished through the implementation of the transportation control plans incorporating the measures discussed below. These measures include additional stationary source controls, measures providing for a reduction in vehicle miles traveled (VMT), inspection and maintenance programs, retrofit emission controls for in-use vehicles, and gasoline supply limitation. Technical information on the inspection

and maintenance and retrofit measures discussed below are set forth in Appendix N to 40 CFR Part 51. The appropriateness of a particular measure for a specified area is determined by a variety of factors, which are also discussed below. Although the costs of certain measures are discussed in this preamble, the social and economic effects of the transportation plans have been evaluated on a state-by-state basis and are set forth in the individual State preambles.<sup>2</sup>

*Considerations in selection of measures.* The determination of which measures should be in a plan for a particular area is based upon several considerations. These include the severity of the pollution problem, the availability of control measures, the existing local control activities and conditions, the State transportation plans, the public hearing comments, the disruptive impact of certain measures, and the pollutant controlled.

In many areas with mobile source pollution problems, the air quality standards can be achieved by only a shift from our present reliance on the automobile to a more balanced reliance on all forms of public and private transit. In a number of these areas, emission controls on motor vehicles alone will never be adequate. Nonetheless, substantial improvement in air quality can be achieved by reductions in vehicle miles traveled to some extent by 1975 and up to 10 to 20 percent by 1977.

Since the air quality standards are to be achieved as expeditiously as practicable, the Administrator has considered the speed with which various emission control strategies could be implemented. Measures such as those providing for some VMT reductions can be implemented before other measures such as retrofits. Extensions in time, thus, could not be granted to retrofit measures until appropriate VMT reduction measures were provided at earlier dates.

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<sup>2</sup> "The Clean Air Act and Transportation Controls, An EPA White Paper", published in August, 1973, by the Office of Air and Water Programs, Environmental Protection Agency, provides additional analysis of social and economic impacts related to transportation control requirements.

The Administrator considered the existing activities, controls, and conditions in local areas. In view of the significant variations in local situations, the Administrator recognizes that transportation plans must be formulated with flexibility to complement local conditions. If an urban area is developing expanded mass transit facilities, the Agency's transportation plan might provide complementary control measures such as bus/carpool lanes. Conversely, if stationary source controls are presently inadequate, additional stationary source controls might be added in lieu of other measures.

The State plans and public hearings aided this process. If the States have submitted plans that are in part approvable, the Administrator has attempted to promulgate measures that supplement the approved portions [sic] the measures included in the plan the State is expected to submit. The Administrator has also made many changes based upon constructive public hearing testimony on the proposed plans.

The disruptive impact of various control measures was reviewed. Certain measures, such as the catalytic retrofit device, may place a large financial burden on the individual vehicle owner as compared with other retrofit devices or VMT reduction measures. On the other hand, the amount of VMT reduction that could be accomplished without a significant disruption varied according to the transit alternatives and traffic patterns existing in a specific region. The Administrator considered these factors and their relationship to the legal mandates of the Clean Air Act.

Characteristics of the pollutant being controlled had an impact on the plan. Carbon monoxide is generally a localized pollutant problem often limited to a central business district. The oxidant or smog problem, however, usually covers an entire urban-suburban area. Consequently, the VMT reduction control measures may vary according to an area's pollution problem. Furthermore, certain retrofit control devices are more effective on controlling the emissions of carbon monoxide than hydrocarbons or the reverse.

Based on the factors noted above, the Administrator generally determined the control strategy according to the following priorities, which reflect guidance provided by the statute: (1) Additional stationary source control; (2) some VMT reduction measures and/or limited inspection and maintenance; (3) additional VMT reduction measures, and/or vehicle retrofits; (4) catalytic converter retrofits; and (5) gasoline supply limitations in 1977.

#### ADDITIONAL STATIONARY SOURCE CONTROLS

Controls to prevent hydrocarbon emissions will be imposed on a variety of stationary sources. These regulations have been patterned using the general examples of emission limitations attainable with reasonably available technology (40 CFR Part 51, Appendix B). The major changes have been to tailor the requirements to local restrictions such as the Los Angeles County Air Pollution Control District (APCD) Rule 66 and the Texas Regulation V—Control of Air Pollution from Volatile Carbon Compounds. In addition to stricter controls on many organic solvents used for paint thinners, dry cleaning, degreasing, printing, and other industrial processes, vapor recovery systems that prevent evaporation of gasoline vapors into the air will be required for the various phases of gasoline marketing. Most stationary source controls can be implemented by 1975. The implementation of vapor recovery systems depends upon whether the controls are placed on the filling of service station tanks (Stage I), or on the filling of individual vehicle tanks (Stage II) and whether the degree of control in Stage II is 80 percent or 90 percent. In most regions of the country, the Administrator has concluded that implementation of Stage I controls can be completed by March 1, 1976, assuming that all regulatory authority is adequate by March 1, 1974, and that 24 months are needed for full implementation with partial implementation achieved by March 1975. If the Stage II measure requires 80 percent control, its implementation can be completed by June 31, 1976. Much of the work needed to develop such systems is already underway. If a Stage II measure requires 90 per-

cent control, its implementation can not be completed until May 31, 1977, since the technical problems are greater. In a few regions, these timetables can be accelerated, particularly where the number of stations involved is not excessive. The EPA is currently carrying on an investigation of the desirability of exempting certain organic compounds from control and of the adequacy and feasibility of various hydrocarbon emissions control methods.

MODERATE REDUCTIONS IN VEHICLES [sic]  
MILES TRAVELED

In the majority of regions requiring additional controls, the combined impact of stricter controls on stationary sources and the establishment of an inspection and maintenance system will not provide emission reductions adequate to achieve the standards by 1975. Consequently, EPA is promulgating a variety of measures to reduce vehicle miles traveled in these regions.

The Administrator has noted that in several urban areas a shift from our present reliance on automobiles occupied by one or two persons to a greater reliance on other forms of transit is essential to the achievement of the air quality standards. Significant reductions in vehicle miles traveled can also be accomplished within a limited time span. In making this determination, the Administrator recognizes that the States have had practically no experience with transportation control measures as a means of dealing with air quality problems and that the success of particular VMT reduction measures is difficult to predict. However, recent developments involving bus lanes, mass transit improvements, carpool programs, bikeways, and other innovations indicate that many VMT reduction measures are available and feasible. Furthermore, the public in many of our urban areas recognizes the need to place less emphasis on the automobile for urban mobility and is already encouraging the implementation of steps to develop alternative forms of transit. Accordingly, the Administrator believes that reasonable

VMT reduction measures can be successfully implemented.

Some of the regulations being promulgated will have significant effects on the future development of urban transportation in the major cities of this country. A clear implication of these air plans is that future augmentation of mass transit must focus not only on the center city streets but also on urban/suburban routes. It is expected that the regulations will lead not only to substantial reductions in air pollution, noise, congestion, and energy consumption, but to the development of more mass/rapid transit to serve the growing urban and suburban regions of the nation. The need, desirability, and feasibility of reducing urban auto use are no longer issues. The problem is determining the degree to which VMT reductions can be reasonably implemented within the limited time frames.

The amount of VMT reduction that can be considered "reasonably available" varies greatly according to a city's individual characteristics and the ability of other modes of transportation to absorb the demand that would be created by a significant VMT reduction. A measure cannot be considered "reasonably available" if putting it into effect would cause severe economic and social disruption. Although some reduction in personal travel could certainly be absorbed without disruption, to achieve a significant VMT reduction, the bulk of the travel displaced from single-passenger automobiles must be absorbed by such other modes of transportation as carpools, walking, bicycling, or public transit.

The significant expansion of public transit facilities that can be accomplished by 1975 depends on the upgrading and expansion of bus services. Much can be done in this regard. Scheduling and service can be improved. Individual lanes of freeways and other major roads can be set aside for the exclusive use of buses. Significant numbers of new buses can be purchased and put into service by 1975; according to Department of Transportation figures, 2,500 transit buses were sold in this country in 1972, but there is considerable potential for expansion

of the transit industry's production by two- or three-fold. Foreign sources of supply could provide additional resources.

The Environmental Protection Agency is working with the Department of Transportation to assure increased Federal support for short-term augmentation of mass transit capacity and appropriate modifications of highway facilities to permit increased utilization of mass transit.

In addition to public transit, part of the transportation demand created by VMT reductions can be absorbed by carpools. Private automobiles, which are designed to carry four to six persons, carry an average of 1.1 to 1.4 persons per trip for work trips in major urban areas, and thus represent the largest unused pool of transportation capacity presently available.

The measures mentioned above are primarily concerned with providing an alternative to low-occupancy use of private automobiles. Although measures such as buying more buses and improving bus service, providing for carpool programs, building bicycle paths, and (in the long run) building new rapid rail transit systems increase the availability and attractiveness of alternative transit forms, VMT reductions will not necessarily be achieved unless disincentive restrictions are placed on the use of automobiles.

The applicability of both measures—*incentives* such as bus lanes that increase the attractiveness of alternative transit forms and *disincentives* such as parking limitations that discourage the low-occupancy use of private automobiles—varies according to the conditions in the individual urban area. For example, bus lanes are a mere appropriate strategy in Washington, D.C. than certain other areas. Similarly, parking restrictions are more applicable to a major center like Boston than to a small city with few transit alternatives like Fairbanks, Alaska.

After consideration of the already available transit alternatives, the city's local conditions, and the applicability of various incentive and disincentive measures, the Administrator has determined that varying degrees of VMT reduction are feasible in particular areas. The plans de-

veloped suggest that a 3 to 10 percent VMT reduction can be achieved in the vast majority of affected regions by 1975. Since the Act specified that all reasonably available measures be instituted before any time extension is granted, the Administrator is taking into consideration all VMT-related measures presently being implemented by a municipality and augmenting those measures with methods that are available, applicable, and adoptable in the individual area by 1975.

Through our studies and the public hearing process, the Agency has also determined that it may be unrealistic to expect reductions in auto use in a region as a whole greater than 10 to 20 percent by 1977. Greater reductions may be achieved in limited areas under appropriate circumstances as is illustrated by New York City, which has a well developed transit system and hopes to accomplish a 40 percent VMT reduction in the downtown area by 1977. Generally, however, reductions beyond 10 to 20 percent would require a special and, in most cases, unreasonable effort unless driving is to be cut without a corresponding increase in mass transit. Achievement of even the levels provided for in these plans will require a strong commitment by local areas to implement strict disincentive programs, improve mass transit, and make carpooling or other programs work.

EPA is promulgating a number of measures designed both to increase the attractiveness of alternative forms of transit and to discourage the low-occupancy use of automobiles. The measures include: on-street and off-street parking reductions, regulatory fees for mass transit augmentation, vehicle free zones, bus/carpool lanes, carpool matching systems, carpool programs stressing preferential treatment, and heavy-duty vehicle bans. In some instances, proposed VMT measures are not being promulgated. These various alternatives are presented in the following discussion.

*Parking restrictions.* Parking restrictions are used in the majority of plans to discourage automobile use in urban centers. Restrictions in the central business district can significantly reduce carbon monoxide levels. As a measure to discourage the commuter from using his

vehicle, parking limitations can effectively reduce emissions during the rush hour and result in reduced oxidant concentrations later in the day. On-street parking regulations can also result in decreased congestion and reduced emissions due to improved traffic flow.

In most EPA proposals, all parking facilities on which the actual construction work had not begun by August 15, 1973, would have been subject to review. In response to comments received, this definition has been revised to exempt such facilities if the actual construction contract has been let by that date.

However, where a developer has undertaken to build a facility, whether individually or as part of a larger structure, but the actual construction contract has not yet been signed, review will still be required. It is EPA's judgment that the project in such circumstances will still be at an early enough stage so that review to determine the possibility of decreased use of single-passenger automobiles will still be justified. However, the Administrator also recognizes that such review may be unduly burdensome in particular cases, and comment on this point is particularly invited. If the comments indicate that a less restrictive definition is justified, the promulgated regulations will be amended accordingly.

*Regulatory fees for mass transit augmentation.* Several of the plans call for the imposition of regulatory fees on parking. In earlier Notices of Proposed Rulemaking, the Agency expressed some doubt about its authority to impose such fees. That legal question has been extensively reexamined, and EPA has now concluded that such a step is authorized by the statute. The transportation control measures promulgated today will require a significant change in the driving habits of the American people. The use of fees can help to bring that change about with a minimum of social disruption because of the wide latitude they leave to individual choice. Those whose needs or preferences are strongly in favor of using the single-passenger automobile may continue to do so, although at a somewhat higher cost; those who can easily adapt to the use of other modes of transport will have a finan-

cial incentive to do so. Many public comments supported the adoption of such fees. In addition, the enforcement of such fees will be less difficult than some other measures. Finally, such fees will be used to support mass transit. Expansion of mass transit is essential if the disincentives to automobile use imposed by transportation control plans are to have the desired effect. Such a use of the proceeds will also greatly mitigate the potentially regressive nature of such fees.

In requiring the States and EPA to impose transportation controls where they are needed to meet air quality standards, the Congress imposed a regulatory task whose difficulty and complexity are virtually unparalleled. The legislative history shows that Congress fully recognized the magnitude of the problem. At the same time, the statute's description of the exact types of measures that may be imposed is extremely broad and general. In the face of this broad language, the Administrator concluded that the Congress intended him to impose the method of control that he determined was best able to achieve the purposes of the statute.

*Carpool systems.* Experience to date with carpool programs suggests that policies to encourage carpooling might double auto occupancy rates for downtown peak period work trips. If a 10 to 50 percent increase in auto occupancy is adopted as a realistic range of possible effects, the net effect of carpool policies on total urban area auto use might be a 5 to 10 percent reduction.

EPA is promulgating measures that provide computerized carpool matching programs and preferential carpool treatment programs. The matching program provides for the formation of carpools and the preferential treatment programs provide incentives such as free parking to encourage carpools. Under the measures included in some plants, disincentives such as parking space reduction or paid, rather than free parking, are included to discourage single occupancy on commuter trips.

*Bus lanes.* Bus priority treatment consists of allocating highway facilities preferentially to buses for the purpose of improving the quality of bus service. Methods of effecting bus priority treatment in the transportation

plans include reserved lanes for buses (and/or carpools), preferential access for buses at freeway ramps, and certain traffic engineering improvements. The forms of bus lanes set forth in either the plans proposed or approved by the States or promulgated by EPA include normal bus flow lanes, and contra-flow lanes. In the case of California, the U.S. Department of Transportation suggested that dedicated freeways or major roads be used as an alternative to the bus lane approach. Based on comments received, EPA has determined that the bus lane concept is preferable in these promulgations.

The use of bus (and/or carpool) lanes has been observed to increase mass transit freeway speeds by a factor of two or more. Through the elimination of congestion problems, bus service dependability is increased as late arrivals are significantly reduced. Furthermore, bus ridership should increase, and the fares may eventually be reduced. Because of these factors, the regulations set forth for bus lanes are expected to be a positive inducement to increased bus patronage. The timetables for implementation of bus lanes will vary according to regional situations.

*Heavy-duty vehicle restrictions.* The economic fabric of this country's urban and suburban areas is dependent on an extensive and flexible system of truck deliveries to industrial and commercial establishments. At the same time, emissions from heavy-duty vehicles, which are almost exclusively trucks, are regulated far less stringently than those from passenger cars.

The degree of restriction on truck VMT consistent with the maintenance of a healthy economic structure in a region will vary greatly from city to city. In most instances, the potential for economic disruption combined with the low contribution of these trucks to total emissions caused EPA to reject such measures. In certain areas, however, it was determined that a restriction of truck operations to hours when their emissions are not likely to contribute to oxidant formation was practicable, and measures to accomplish this will be implemented.

*Bikeways.* America is enjoying an unprecedented boom in bicycle sales and usage. In 1972 bicycles outsold automobiles, 13 million to 11 million. Bicycle use has doubled in the past ten years.

A preliminary analysis by EPA suggests that increased use of bicycles in urban commuting could reduce VMT by 1 to 2 percent. Public comment in the course of this rulemaking also favored the increased use of bicycles.

At present the major obstacles to cycling are high accident rates, high bicycle theft rates, increased exposure to auto pollutants, and insufficient support facilities. The last problem tends to cause the previous three, and all of them could therefore be greatly alleviated by providing segregated bikeways and adequate support facilities.

Many regions affected by these promulgations intend both to expand their networks of such bikeways and to integrate them with mass transit facilities. EPA fully supports and encourages such programs.

*Vehicle free zones.* Traffic free zones are primarily promulgated to control local carbon monoxide problems. The zones are necessarily restricted in size (approximately ten blocks or less) in order to provide foot access. Consequently, the zones can be put into effect by 1975 since no additional transit facilities are required. Although increasing the size of the vehicle free zone tends to increase the potential air quality improvements, such action also increases the problem of access, circulation, and peripheral congestion and pollution.

*Selective vehicle use prohibitions.* In several regions, EPA proposed a regulation under which the vehicle population would have been divided into five categories. Each category of vehicles would have been required to display prominently a tag of a distinctive color; on one day of each working week vehicles marked with one such color would have been forbidden to operate.

Testimony at all the public hearings indicated that measures of this type so far proposed would be unenforceable because of their severeness and arbitrary nature. In addition, the number of additional enforcement personnel necessary to implement such a program would then have been so great as to preclude the reasonable

availability of this measure. Were they to be implemented, many very workable methods of evading the requirements would doubtless be devised.

*Inspection and maintenance.* Considerable reductions in motor vehicle emissions can be achieved by requiring all vehicles in an area to be tested annually for emissions, and then requiring those vehicles that exceed a certain level to be serviced until they can pass the test. This process is called "inspection and maintenance" (I/M). If additional stationary source controls are not adequate to attain the standards, the Agency considered the implementation of inspection and maintenance measures as well as measures to reduce vehicle miles traveled.

Two different types of inspection programs have been promulgated: (1) an "idle test" program that measures emissions while the vehicle is running in neutral and (2) a "loaded test" program that measures emissions while the vehicle is running in gear on a treadmill-like device called a dynamometer. The effectiveness of these programs depends primarily upon the fraction of the vehicle population forced to obtain corrective maintenance. For example, a program of inspecting idle mode emissions is estimated to result in reduction of 11 percent for hydrocarbons (HC) and 10 percent for carbon monoxide (CO). These results assume that the standards set for the inspection are sufficiently stringent to assure that 50 percent of the vehicles tested would fail the test if no unusual maintenance were obtained prior to the inspection. This concept is generally referred to as an "initial failure rate" of 50 percent. (Of course, if such vehicles are maintained in anticipation of the inspection, they need not fail, and emissions will be reduced.) An initial failure rate of only 10 percent for an idle test provides reductions of 6 percent for HC and 3 percent for CO. A loaded mode inspection should provide a 15 percent HC and a 12 percent CO reduction at a 50 percent initial failure rate and an 8 percent HC and a 4 percent CO reduction at a 10 percent initial failure rate. These reductions are representative of an annual inspection program. If semiannual inspection programs are employed, additional reductions are expected.

Annual emissions inspection on State-operated lanes is estimated to cost less than \$2 per vehicle. Maintenance costs observed in fleet studies of various I/M approaches have been found to lie in the range of \$20 to \$30 for those failing the inspection test. However, the annual average maintenance cost to all vehicles subject to inspection is estimated to be about \$3 per vehicle when the cost of maintenance that would normally have been performed voluntarily is netted out of the estimated maintenance cost.

If the State has adequate regulations to implement an I/M program by March of 1974, the State should be able to acquire necessary equipment, prepare facilities, train personnel, complete a pilot program, and be ready to begin an inspection cycle by May 1, 1975, for an idle test program and by August 1, 1975, for a loaded test program. Accordingly, a year's cycle could be completed and full credit taken for an I/M program by May 1, 1976, or August 1, 1976. These compliance dates represent approximately an 8- to 9-month delay of the inspection schedules previously proposed. The original schedule assumed the State could begin taking actions to set up inspection systems by summer of 1974. Time extensions are thus generally required for the implementation of inspection and maintenance programs.

A few States, however, have either already begun implementing inspection and maintenance programs or have existing safety inspection lanes. The State of New Jersey already has an emission inspection program operating as does the City of Chicago. In other areas, such as Portland, Oregon, the State government has taken the initial steps to make an I/M program operational. EPA has thus used or accepted earlier completion dates in certain situations. The Agency has also used completion dates slightly later than those mentioned above for States that have already developed realistic implementation time schedules that require a limited amount of additional time.

Although no programs have been conducted to investigate the effect of inspection and maintenance on medium-

duty vehicles (vehicles weighing from 6,000 to 10,000 pounds), these vehicles are similar to light-duty vehicles; engine design, operational characteristics, and maintenance habits are closely related to the average automobile. Thus, the Administrator has determined it is reasonable to predict similar effects for inspection and maintenance of medium-duty vehicles as have been discussed above for light-duty vehicles.

*Retrofits.* If additional stationary source controls, moderate VMT reductions, and implementation of inspection and maintenance cannot provide an adequate reduction to achieve the air quality standards, the Administrator considered the implementation of retrofit emission control measures. A retrofit measure can be defined as the addition of any device, system, modification, or adjustment made on a motor vehicle after its initial manufacture to achieve a reduction in emissions. The retrofit packages considered included: vacuum spark advance disconnect (VSAD) with lean idle; air bleed to the intake system; exhaust gas recirculation; oxidation catalyst for both medium- and heavy-duty vehicles.

Implementation of strategies employing these retrofit systems cannot be completed by May 31, 1975, and thus an extension is required for these strategies. Accordingly, as required by the Act, the Administrator considered and applied all measures available by May 31, 1975, before promulgating retrofit measures. It should also be noted that the implementation of an inspection and maintenance program accompanies the implementation of all retrofit measures owing to the need to keep the retrofit devices in good operating condition.

*Vacuum spark advance disconnect (VSAD) with lean idle.* Two basic engine modifications employed by the motor vehicle manufacturers in meeting Federal exhaust emissions standards have been the leaning of air/fuel ratios and the modification of ignition (spark) timing. The modification of these parameters in pre-controlled (pre-1968) vehicles similarly reduces exhaust emissions. Because 1968-and-newer vehicles have utilized these modifications to some extent to meet Federal emission standards, this retrofit technique is considered to be applicable

only to pre-controlled vehicles. This judgment has recently been supported by difficulties the State of California has experienced with this retrofit on controlled vehicles. It is further recognized that this retrofit cannot be used on approximately 10 percent of pre-controlled vehicles that do not employ vacuum spark advance. This system will accomplish average emissions reductions per retrofit vehicle of 25 percent for HC and 9 percent for CO.

The initial cost of purchase and installation of this system, which is commercially available, is estimated to be \$20. Device maintenance can probably be limited to an annual readjustment of the idle air/fuel ratio and would cost about \$5. The VSAD retrofit is considered the most cost-effective retrofit device.

The VSAD retrofit device is currently being used on over 800,000 vehicles in the United States and thus no further evaluation of its emission reduction potential or development is required. If necessary regulations are adopted by March of 1974, States can order and receive the devices, complete an installation training program and be prepared to begin installing the system by December of 1974. Installation of the device on all pre-controlled vehicles could be completed within a year and thus full implementation can take place by December of 1975.

*Air bleed to the intake system.* Many devices have been designed to introduce, by one means or another, excess air into the intake system of a vehicle. This is one way of reducing HC and CO levels. The reduction achieved varies with the amount of air allowed into the intake system. This technique is applicable to some extent to all light-duty vehicles, but because of the relatively lean air/fuel ratios on controlled vehicles the technique is only being promulgated for pre-controlled vehicles. Emission reductions of 21 percent for HC and 58 percent for CO are expected to result from the implementation of this measure. The installed cost of the air bleed system is estimated to be approximately \$40 to \$60. A fuel economy improvement of 4 percent as-

sociated with the use of this device would reduce operating costs by \$1.20 per 1,000 miles of operation.

No air bleed device has been evaluated to the extent necessary to allow immediate implementation actions. It currently appears that substantial data on such systems will be available from EPA by November 1974. Allowing the States 2 months to review data on this device and to approve specific manufacturers, selection of an approved device should be completed by January 1975. Seven months for manufacturing, installation, and training and an additional 12 months for installation on the vehicle population would result in full implementation by August 1976.

*Oxidation catalyst.* Because of the automotive industry commitment to the use of catalysts in meeting future Federal emission standards, it follows that catalyst systems are being identified as retrofit candidates as well. Catalyst retrofits are applicable to cars capable of running properly and without excessive engine wear on a commercially-available, lead-free gasoline. Such lead-free gasoline will be commercially available by July 1, 1974, as a result of regulations promulgated by EPA on January 10, 1973. EPA's best estimate of the proportion of cars to which catalytic systems are applicable is 20 percent of pre-1971 and 75 percent of 1971-1974 model year vehicles.

The implementation of a strategy employing catalytic retrofits is expected to account for emissions reductions of 50 percent for HC and 50 percent for CO.

Estimates of the cost to be borne by the consumer for a catalyst retrofit package will vary according to the type and age of the consumer's vehicle, and the organizational structure selected for retrofit installation. With an installation program run in State-owned (or franchised) inspection and installation centers, the average initial cost would be approximately \$125. However, with an installation program designed to make use of traditional distribution channels and local service establishments, the initial price could rise to well over \$300. All retrofits, however, could be financed through a state or local tax program.

The catalytic retrofit devices has not been evaluated to the extent necessary to allow immediate implementation action. Substantial data, on this device, however, should be available by the fall of 1974. This will allow time for the States to review these data, and approve a particular manufacturer's product. Orders for this device could probably be placed by January of 1975. From the time the order is placed until first installation will require 10 months because of the more extensive design and manufacturing requirements of the catalysts. Installation of a catalyst system is significantly more time consuming than for other retrofit strategies. (Three man-hours compared to less than 1 man-hour for air bleed.) To minimize the impact of these installations on the service industry, 18 months have been estimated for installation on all qualified vehicles with full implementation by May 1977. If only fleet vehicles are retrofitted with catalysts, or if only one model year of vehicles is retrofitted with catalysts and 1968 or later models are retrofitted with other devices, catalyst retrofit installation could be completed within 12 months or by December of 1976.

In view of the high cost of the individual vehicle owner associated with catalytic retrofit devices and the long implementation time, the Administrator has promulgated this measure only after other available and applicable measures short of gasoline supply limitations were applied. Since the measure requires an 18- to 24-month extension—and, consequently, all other measures can be considered—catalytic retrofits are only promulgated for areas with severe air pollution problems.

In addition, consideration is being given to retrofit of gasoline-powered vehicles in the 6,000 to 14,000 pound class, commonly referred to a medium-duty (6,000 to 10,000 pounds) and heavy-duty (above 10,000 pounds). There is very limited application of these measures since they are presently being evaluated. Those regions that will implement these measures are active participants in this evaluation.

*Gasoline supply limitations.* Several of the proposed transportation controls included measures to limit the gasoline supply in certain areas in order to reduce vehicle miles traveled. The measure included two types of regulations: (1) a gasoline supply lid that would become effective in 1974 to limit the quantity of gasoline sold to fiscal 1973 levels; and (2) a regulation to be implemented on May 31, 1977, to reduce an area's gasoline supply, and thus VMT, to the extent necessary to achieve the standards.

The gasoline supply lid requirement has been dropped as a primary measure. The Act requires that all "reasonably available" measures must be implemented by May 31, 1975, before granting an extension. Based upon the comments received at the public hearings on this measure and the Agency's evaluation of the feasibility of implementing and administering successful gasoline supply limitations, the Administrator has determined that a gasoline supply lid cannot be considered "reasonably available." The possibilities of evasion, the likelihood of noncompliance, and the difficulty of enforcement are too great to make this measure practicable.

The gasoline supply reduction regulation to be implemented on May 31, 1977, however, has been retained in several plans. As was noted above, the Clean Air Act required air quality standards to be achieved by 1977 without regard to cost or social disorganization that may result as a by-product of achievement. If gasoline supply limitations are needed to achieve the standard, the "reasonableness" criterion is not a determining factor. Accordingly, the Administrator was obligated to use gasoline supply limitations as a final resort measure in certain areas with severe air pollution problems. Most of these areas required reductions in vehicle miles traveled far in excess of 10 to 20 percent. In some regions, however, the required VMT reductions may well be accomplished through the specified VMT reduction measures. Gasoline supply limitations were required in these areas only to assure the attainment of the standards by 1977. If a review of air quality data and VMT reduc-

tion monitoring information prior to 1977 indicates that the gasoline reduction measure is not required, supply limitations will not be implemented.

#### LEGAL AUTHORITY AND ENFORCEMENT

In the complex field of transportation controls, States and other governmental entities have a special obligation to carry out and enforce implementation plans simply because Congress has placed that responsibility upon them. In a comparable situation, a Federal court has held that a county government and local sewage districts can be required, under implementation plans to control water pollution, to install sewage treatment facilities to handle the pollution created by individual citizens emitting pollution directly into a public body of water.

Many of the measures promulgated herein include requirements that Federal, State, or local units of government take specified actions to control air pollution from transportation systems. The Clean Air Act and its legislative history demonstrate that this was the intent of Congress. The approach of leaving primary responsibility for implementation at the State and local level is also made necessary by the nature of air pollution generated by millions of individual vehicles operating on an extensive network of public roads owned and administered by State and local governments.

The specific requirements imposed herein upon States and localities are based largely on two conclusions in addition to the factors discussed above: (1) that the governmental units must abide by valid implementation plan requirements just as much as any other source owners, and (2) that they are the owners and operators of pollution sources through their ownership and operation of highway transportation facilities.

The question has been raised in public comment whether governmental entities may be subject to Federal regulation and Federal enforcement under the Clean Air Act. There is no doubt that regulations may be applicable to such entities under the Act. Section 113 of the

Act permits Federal enforcement of applicable implementation plans against "any person" who is in violation of "any requirement." Section 302(e) states, "When used in this Act \* \* \* the term 'person' includes [a] \* \* \* State, municipality and political subdivision of a State." Section 118 extends the requirement of obedience to such plans to Federal entities.

The question remains, what kinds of requirements must a State or other governmental entity comply with? The most obvious situation is one in which a State is operating a direct stationary pollution source such as a municipal incinerator. It is no less clear, however, that the Act allows the control of many kinds of direct and indirect sources relating to mobile pollution. Parking and road facilities constitute such sources and the control of them is a valid exercise of the authority in section 110 (a) (2) (B) and 110(c) to promulgate such regulations as may be necessary to attain the national ambient air quality standards.

Transportation is a necessary service. In our society, the form in which it is provided depends overwhelmingly on the regulatory, taxing, and investment decisions made at all levels of government. By building and maintaining roads and highways, by licensing vehicles and operators, by providing a system of traffic laws, and in many other ways, government has encouraged the growth of automobile use to its present levels. There is nothing inevitable about such a choice. Governments could equally well have chosen to discharge their basic function of maintaining a transportation system in ways that would have discouraged the use of single-passenger automobiles, and encouraged the use of mass transit. But often they have not.

The production of food, electricity, and other consumer and industrial goods is as necessary in our society as transportation. In each case, the Clean Air Act authorizes regulations requiring such an activity, whether State or private, to be undertaken in the least polluting way in order to attain and maintain the air quality standards. There is no valid distinction between such produc-

tion facilities and the State-owned automotive transportation facilities. In a comparable situation, the Supreme Court has held that State-owned rail transportation facilities must comply with Federal safety regulations.

A direct source of air pollution is one from which pollution is emitted directly into ambient air. Direct sources include not only automobiles and other vehicles, but also the facilities on which they are located during their operation—parking facilities and roads. Pollution is emitted directly into the ambient air from such facilities, and often the most feasible method of reducing it is by imposing restrictions on their owners and operators.

Many such facilities may also be viewed as indirect sources of air pollution. An indirect source is one that encourages mobile source pollution at locations not necessarily coincident with the source itself by serving as a trip attraction for automobile drivers, or which provides a parking or driving convenience. Thus, the availability of ample, low-cost parking facilities and high-speed freeways influences individuals to use vehicles with as few as one person in them, rather than less-polluting modes of transit. Such facilities may legitimately be charged not only with the pollution arising directly from their premises, but also with the total pollution in the region emitted by the traffic increase which they encourage.

For these reasons, the Administrator has concluded that regulations placing restrictions on parking and on the use of road space are essential to reduce the amount of air pollution generated by automobiles, and that they are valid exercises of EPA's regulatory authority.

The Administrator is also promulgating regulations requiring that vehicles allowed to operate on public roads be inspected or "retrofitted" with emission control equipment. Use of public roads by large numbers of publicly registered and regulated vehicles without either proper maintenance or adequate control equipment also causes damage to health. The requirement that the road owners

and the licensing and regulating authorities prohibit such use is a reasonable means of preventing such damage.

Direct Federal enforcement and massive, duplicative Federal programs aimed at vehicles on an individual basis were not the means contemplated by the Act to solve these problems. It is clearly necessary that implementation of transportation control plans be carried out at the State and local level. The Chairman of the House Committee that reported out the amendments to the Act described their purpose as follows:

If we left it all to the Federal Government, we would have about everybody on the payroll of the United States. We know this is not practical. Therefore, the Federal Government sets the standards, we tell the States what they must do and what standards they must meet. These standards must be put into effect by the communities and the States, and we expect them to have the means to do the actual enforcing.

Equally clear, however, is that the amendments of 1970 were designed to cure deficiencies that had resulted from total reliance upon state and local action to solve what was increasingly recognized as a national health problem. The regulations now being promulgated will provide the necessary assurance that such state and local action will be forthcoming.

Under section 113(a)(1) and (2) of the Act, the Administrator is authorized to issue orders and to bring civil actions or seek penalties. Although the legal authority to enforce these plans is clear, the primary effort—as is true for all implementation plans—will be directed toward working with the States both to develop and to implement effective strategies. This effort should continue even after these measures have been promulgated, so that all affected states eventually assume voluntarily the direct responsibility for enforcement of the plans.

In some instances, new regulations will be necessary on a State level. In others, existing regulations will be adequate. Where State-enacted Statutory authority is not

adequate, the Clean Air Act and these regulations can provide the legal basis for programs at the State or local level.

As a matter of administrative convenience, a provision regarding violations and enforceability is being deleted from the regulations being promulgated for each State, and replaced by a general regulation covering these subjects which is applicable to all regulations promulgated under this part. No change in meaning or effect is intended by this change. Each of the regulations promulgated or approved is considered to be enforceable by the Agency, including all regulations requiring employers to provide mass transit priority incentives.

#### SUMMARY OF APPROVAL/PROMULGATION ACTIONS

Approval/promulgation actions presented in the initial group cover 16 separate air quality control regions (AQCR) found in 8 states. The actions taken in these 16 separate cases concerning transportation control plans are shown in Table 1. Air quality control regions or sub-regions are identified using the name of a key metropolitan area associated with the region. For example, the Texas portion of the Southern Louisiana-Southwest Texas interstate region is designated Beaumont. Preambles and regulations are provided separately for each State.

TABLE 1.—*Approved/promulgation summary*

	<i>Region</i> <sup>1</sup>
Plan fully approved in initial group:	
Minnesota: Minneapolis-St. Paul	1
Oregon: Portland	1
Ohio: Toledo, Dayton	2
	<hr/>
Total	4
Plans requiring partial EPA promulgation:	
Colorado: Denver	1
Ohio: Cincinnati	1
	<hr/>
Total	2
Plans requiring total EPA promulgation:	
Massachusetts: Boston, Springfield	2
Texas: San Antonio, Dallas-Fort Worth, Austin-Waco, Houston/Galveston, Corpus Christi, El Paso, Beaumont <sup>2</sup>	7
	<hr/>
Total	9
Plan being repropose for later promulgation:	
Indiana: Indianapolis	1
	<hr/>
Grand total	16

<sup>1</sup> Air quality control region or portion thereof.

<sup>2</sup> Only stationary source controls are promulgated in this action.

#### PUBLIC COMMENT AND REVIEW

These promulgations of transportation controls and those to be promulgated within the next few weeks have involved ample opportunity for both written comment and oral testimony. However, the Administrator wishes to call attention to the fact that it is always appropriate for members of the public and affected interests to submit written comments on rulemaking actions even after the regulations have been promulgated. Accordingly, although these regulations become effective upon promulgation, interested persons are encouraged to submit writ-

ten comments to the Administrator or the appropriate Regional Administrators for 30 additional days from the date of promulgation of the transportation control plan for each region. This does not affect the timetable for bringing any legal actions regarding those plans. Petitions for review may be filed in the United States Court of Appeals for the appropriate circuits within thirty days from the date of each promulgation or approval, pursuant to section 307 of the Act (42 U.S.C. 1857h-5(b)(1)).

This rulemaking is made pursuant to section 110(c) and 301(a) of the Clean Air Act (42 U.S.C. 1857c-5(c) and 1857g).

Dated October 25, 1973.

RUSSELL E. TRAIN,  
Administrator.

Part 52 of Chapter I, Title 40, is amended by adding § 52.23 as follows:

#### § 52.23 Violation and enforcement.

Failure to comply with any provisions of this part shall render the person or Governmental entity so failing to comply in violation of a requirement of an applicable implementation plan and subject to enforcement action under Section 113 of the Clean Air Act. With regard to compliance schedules, a person or Governmental entity will be considered to have failed to comply with the requirements of this part if it fails to timely submit any required compliance schedule, if the compliance schedule when submitted does not contain each of the elements it is required to contain, or if the person or Governmental entity fails to comply with such schedule.

[FR Doc. 73-23186 Filed 11-5-73; 8:45 am]

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Title 40—Protection of Environment

**CHAPTER I—ENVIRONMENTAL  
PROTECTION AGENCY**

**SUBCHAPTER C—AIR PROGRAMS**

**PART 52—APPROVAL AND PROMULGATION  
OF IMPLEMENTATION PLANS**

**California Transportation Control Plan**

This notice of final rulemaking sets forth transportation control plans for the following California Intrastate Air Quality Control Regions (AQCR) (hereafter referred to also as Regions): San Francisco Bay Area, Sacramento Valley, San Diego, San Joaquin Valley, and Metropolitan Los Angeles. A General Preamble was published on November 6, 1973, and is part of this rulemaking.

**BACKGROUND**

On March 20, 1973, by publication in the **FEDERAL REGISTER** (38 FR 7325), the Administrator, acting in response to a court order, notified the Governor of California that a transportation control plan should be submitted by April 15, 1973, for the first four of the five regions mentioned above.

The Los Angeles Metropolitan Intrastate Region was already the subject of a separate Court order. There, the U.S. District Court for the Central District of California ordered on November 16, 1972, that EPA propose a transportation control plan for the Los Angeles AQCR by January 15, 1973. This proposed plan appeared in the January 22, 1973, **FEDERAL REGISTER** (38 FR 2194) with minor corrections published on February 7, (38 FR 3526).

Extensive public hearings were held on the plan throughout the AQCR. The proposal was later revised

to make it consistent with the transportation control plans developed for the other Regions. This revised proposal appeared in the July 2, 1973, **FEDERAL REGISTER** (38 FR 17683) and was the subject of a public hearing on August 9-10, 1973.

California did not submit a transportation control plan by the Court-ordered deadline for the other four Regions and accordingly EPA was forced to propose substitute regulations for the San Francisco Bay Area, Sacramento Valley, San Diego, and San Joaquin Valley Intrastate Air Quality Control Regions, 38 FR 18948 (July 16, 1973). These regulations were the subject of public hearings in each of the affected Regions on August 6-10, 1973. No regulations were proposed for the Southeast Desert because the air pollution there comes almost entirely from the Los Angeles Region.

The transcripts of all public hearings are available for inspection at the Federal Information Center, 300 North Los Angeles Street, Room 1011, Los Angeles, California 90012; the U.S. Environmental Protection Agency, Region IX, 100 California Street, San Francisco, California 94111; and the U.S. Environmental Protection Agency, Office of Public Affairs, Room W 311, 401 M Street SW., Washington, D.C. 20460.

The plans promulgated today have, to the maximum extent possible, been drafted to reflect the expressed preference of the State of California and the affected local jurisdictions.

*California Implementation Plan, Revision 3.* The Governor of California submitted Revision 3 of the California State Implementation Plan (SIP) to the EPA by letter dated July 25, 1973; it was received by the Region IX Office for the Administrator on August 2, 1973. This revision included the State's plans for transportation controls as well as a general revision to many rules and regulations pertaining to stationary sources. On September 21, 1973, the Administrator acknowledged receipt of the SIP revision in the **FEDERAL REGISTER** (38 FR 26462) and solicited public comment on that Plan. The notice gave the public 21 days (until October 12, 1973) to sub-

mit comments to the Administrator on the revised State plan. Based upon EPA's review of the Plan and a review of all relevant public comments, the Administrator will revise the approval/disapproval notice of the original implementation plan, published on June 22, 1973, in the **FEDERAL REGISTER** and rescind any EPA regulations that are deemed unnecessary based upon the State submittal.

Although the Administrator cannot make any final determination of the acceptability of the recently submitted State plan until all public comments have been evaluated, some tentative observations can be made.

The State Implementation Plan Revision 3 does not provide for attainment of the photochemical oxidant standard in the Los Angeles AQCR, nor is a strategy presented for attainment. The State Plan proposes the retrofitting of catalysts to automobiles and trucks in the San Francisco Bay Area AQCR; the EPA concurs with this strategy. The State Plan assumes a 95 percent reduction in aircraft emissions by 1977. The EPA believes that this reduction is not attainable without a significant reduction in the number of flights, and such a reduction is not feasible at this time. The State Plan endorses gasoline marketing controls to prevent gasoline vapor losses; the EPA also endorses such controls. The State Plan relies upon local transportation agencies, such as the San Francisco Bay Area's Metropolitan Transportation Commission, to develop and implement improvements in mass transit. The EPA endorses this approach, but requires that the improvements be spelled out in regulatory form. The State does not in all cases utilize the most recent air quality data; an example is San Francisco. For instance, more recent data for San Francisco suggest that emission reductions must be greater than those shown in the State Plan, and these data have been used in this promulgation.

Copies of the Environmental Protection Agency's testimony on the State Implementation Plan Revision 3 given at the State hearings on said Plan are available from the

EPA Region IX Office in San Francisco. Inquiries should be directed to the Regional Counsel, EPA Region IX, 100 California Street, San Francisco, California 94111.

#### SUMMARY

A significant reduction of reactive hydrocarbons will have to occur in all regions covered by this promulgation if the ambient air quality standard for photochemical oxidants is to be attained. In all cases, the controls promulgated will effect the required reduction in reactive hydrocarbons; attainment and maintenance of the oxidant standards will ensure attainment and maintenance of the carbon monoxide and nitrogen oxide standards as well.

The promulgated control measures reflect what EPA considers to be the most feasible approach for meeting the national standards in each region. However, these measures are subject to change subsequent to further study conducted by EPA and others.

Much of the reduction in photochemical oxidant levels will result from measures submitted by the State and already approved, but these measures are not enough to meet the standards. The Administrator has concluded that an extension of the deadline for achieving the standards to 1977 under section 110(e) of the Act is justified because the necessary technology or other alternatives are not available and will not be available soon enough to permit full compliance before 1977. The extension applies to all Regions covered by this promulgation for photochemical oxidants and for carbon monoxide. In reaching this conclusion, the Agency has considered, and applied as part of its plan, reasonably available alternative means of attaining the primary standard.

The plan set forth herein provides for the application of its requirements to most emission sources other than motor vehicles not later than June 1975, as required by section 110(e)(2)(A) of the Clean Air Act, and provides for the application of reasonable interim measures for

control of motor vehicle emissions as soon as they can reasonably be put into effect.

Most of the plan utilizes reasonable and apparently available means of reducing photochemical oxidants, carbon monoxide, and nitrogen dioxide. These measures include review of all new parking facilities with more than 50 spaces to determine their air quality impact; fees to increase parking costs at existing facilities; a ban on motorcycle use if stringent emission standards for new motorcycles are not established; and mandatory inspection and maintenance of light-duty vehicles (including light-duty trucks). In addition, bus-carpool lanes or other bus and carpool preference systems will be set up on selected major streets and highways, carpooling systems will be established in all Regions covered by this rule-making, and employers who provide more than 70 employee parking spaces will have to take stringent steps to discourage single-passenger car commuting by their employees.

Retrofits of catalysts by 1977 and vacuum spark advance disconnect (VSAD) devices on some existing light-duty vehicles upon change of ownership will also be required.

Each of the measures discussed above will be applied as soon as it is reasonably available. However, in many cases implementation will not be practicable by 1975 due either to the present unavailability of the necessary equipment, to the administrative problems involved in setting up the necessary regulatory mechanisms, or to the need to phase in the measures so that the public can adjust to them. Accordingly, as noted above, extensions until 1977 in the time for achieving the standards have been granted to each of the Regions for which plans are being promulgated today.

Even if all the reasonable measures mentioned above are imposed on the timetable indicated (see Table 1), it is estimated that the national standards for photochemical oxidants will not be met in the Regions by 1977.

Under the Clean Air Act, the Agency has no choice but to include in the plan a measure that can achieve the standards by 1977. Consequently, gasoline sales limitations of whatever degree necessary have been included for 1977. If implemented, this would achieve the standards for both photochemical oxidants and carbon monoxide. However, the Agency will utilize every means available to avoid the need to impose severe gasoline rationing to reach that goal by 1977.

TABLE 1.—APPLICABILITY OF EPA CONTROL STRATEGIES FOR CALIFORNIA

Control measures	Regions				
	Los Angeles	San Francisco Bay Area	San Diego	Sacramento Valley	San Joaquin Valley
<b>I. Stationary source:</b>					
a. Vapor recovery at service stations	X*	S	S	X*	X*
b. Organic solvents usage	S	X	S <sup>1</sup>	X	X
c. Control of degreasing operations	X	X	X	X	X
d. Dry cleaning solvent vapor losses	X	X	X	X	X
e. Metal surface coating thinner and reducer	X	X	X	X	X
<b>II. Mobile sources:</b>					
a. Catalyst retrofit (1966-74), LDV and MDV	X*	X*	X	X	X
b. Vacuum Spark Advance Disconnect (1955-65)	S	S	S	X	X
c. Inspection/Maintenance (loaded)	X*	X*	X*	X*	X*
d. Motorcycle limitations <sup>2</sup>					
<b>III. VMT Reduction measures:</b>					
a. Exclusive bus/carpool lanes	X <sup>3</sup>	X	X <sup>5</sup>	X <sup>3,5</sup>	X <sup>3</sup>
b. Bus/carpool matching	X <sup>5</sup>	X	X <sup>5</sup>	X <sup>5</sup>	X <sup>5</sup>
c. Parking supply management	X	X	X <sup>5</sup>	X	X
d. Mass Transit incentives for employees	X <sup>5</sup>	X <sup>5</sup>	X <sup>5</sup>	X	X
e. Parking surcharge	X <sup>5</sup>	X	X	X	X
f. VMT/air quality improvement monitoring program	X	X	X	X	X

446

447

Note: All AQCR's require O<sub>x</sub>/CO extension to 1977.

X = EPA plan.

S = Included in approved State plan.

<sup>1</sup> = Additional regulations are being promulgated.<sup>2</sup> = Limit only if new motorcycle emission standards not promulgated.<sup>3</sup> = Require study and specific recommendations by State.<sup>4</sup> = Included in State-submitted plans.<sup>5</sup> = Recommended by State and local task force as VMT-reduction measure.

*Summary of original proposal.* Below is a summary of the controls proposed in the July 2 and July 16, 1973 FEDERAL REGISTERS for the affected Regions.

1. *Catalyst retrofit.* All automobiles in the San Diego, San Francisco, Metropolitan Los Angeles, Sacramento Valley, and San Joaquin Valley AQCR's, of model years 1966 through 1974, and capable of performing adequately on non-leaded 91 research octane number gasoline (approximately 75 percent of 1971 through 1974 model year cars and 20 percent of 1966 through 1970 model years) were to be equipped with a catalytic muffler. The cost of this device is estimated at \$150 per car.

2. *Vacuum spark advance disconnect.* Automobiles of 1955 through 1965 model years in the Sacramento and San Joaquin Valley AQCR's would have been retrofitted upon change of ownership. The cost would be approximately \$35. In the other critical AQCR's covered by this promulgation, the law currently requires the installation of such devices.

3. *Bus and carpool lanes.* In all AQCR's at least one lane for the exclusive use of buses and carpools was to have been provided on all 3- and 4-lane highways parking facilities would have been required to reduce capacity by 20 percent.

5. *New Parking facilities review.* All new parking facilities, public or private, were to have been reviewed for their impact on air quality before construction.

6. *Computerized carpooling service.* Under this proposal, the State would have to set up a computerized carpool matching system for application in the appropriate AQCR's.

7. *Limitation on gasoline sales.* Gasoline consumption in recent years has grown at a rate of about 4 percent per year. Under this proposal, sales in future years would have been limited to the amount sold in a 1972-1973 12-month period.

8. *Motorcycle controls.* This proposal would have limited the registration (and therefore growth in total number) of motorcycles, as well as placing an operating ban

on motorcycles during certain hours of the day during the "smog season."

9. *Inspection and maintenance.* Under this proposal, the State was to operate a network of inspection stations to detect and minimize the number of improperly adjusted or defective automobiles. Each vehicle was to be inspected yearly and maintenance performed on failing vehicles to minimize emissions.

10. *Stationary source controls.* These regulations included installation of vapor recovery systems at gasoline stations, additional controls on dry cleaning emissions, elimination of certain industrial solvent compounds, improved control on painting operation solvent loss, and additional restrictions on the loss of organic solvents in general industrial use.

#### SUMMARY OF PUBLIC COMMENTS

EPA held public hearings on its transportation control proposals in each affected AQCR, and these hearings were well attended. EPA was impressed with the quality, breadth, and detail of the testimony received and has attempted to modify its plan in response to public comments where possible. Comments were received both on specific technical controls and on broad public policy issues.

*Economic incentives and disincentives.* Many witnesses testified on the subject of emission "taxes", expressing the belief that economic incentives and disincentives might reduce vehicle miles traveled (VMT) more effectively than other measures, and, as a bonus, produce revenue that could be used for mass transit. In general, the schemes presented would either: (1) Surcharge gasoline sales heavily; (2) surcharge some features of the automobile related to its gasoline consumption level, such as weight, displacement, or number of cylinders; or (3) surcharge facilities that serve the automobile, such as parking. The revenue raised by these taxes or charges would be used to improve mass transit and/or subsidize the retrofitting of cars with emission control devices. The City of Los Angeles strongly urged the use of park-

ing fees to discourage unnecessary driving; it was estimated that a charge of only 50 cents per hour of parking time applied in the Los Angeles central business district (CBD) would raise over \$10 million a year, or enough to put some 110 to 120 buses on the road. Many urged the adoption of schemes that both discouraged driving and raise revenue, since it was stated repeatedly at the hearings that the public would only accept restrictions on driving if it sees a feasible mass transit system being put into operation at the same time. Surcharge schemes, properly applied, can accomplish both objectives.

It was emphasized, however, that any scheme to surcharge parking must extend beyond the urban cores, in order to keep core areas competitive with outlying employment and shopping centers. If only CBD parking is charged, people may go where the parking is cheaper or free, further contributing to the decay of the central city. Witnesses also pointed out that parking charges to be effective must be applied to private as well as public parking.

*Standards and attainment date.* Significant controversy arose over two particular requirements under the Clean Air Act. The questions concerned: (1) Whether the National Ambient Air Quality Standard (NAAQS) for oxidant of 0.08 parts per million (ppm) for a 1-hour averaging time is an appropriate standard; and (2) if a socially disruptive measure such as extensive gasoline rationing is required to meet the NAAQS's for oxidant and carbon monoxide by 1977, whether the attainment date should be delayed beyond 1977.

The EPA, as required by the Clean Air Act, continuously reviews the medical basis for the NAAQS's. It is the Administrator's determination that to comply with the meaning of the Clean Air Act—that is, to protect public health with an adequate margin of safety—the 0.08 ppm standard for photochemical oxidant is a sound standard.

With regard to the second question, it is not within the authority of the EPA at the time of promulgation of this plan to extend attainment of the NAAQS's beyond 1977. The Clean Air Act specifically provides for no

major form of transportation, are unduly wasteful of land, energy, and other resources, and have contributed to the decay of central cities. Comprehensive land use planning that takes air quality into account can eliminate the need for many such controls through placement of sources, proximity of employment and residential centers, and provision for mass transit and other measures.

Regulations that require land-use planning tied to air quality considerations were recently promulgated by EPA in response to a court order (38 FR 15834, June 18, 1973). These "indirect source" guidelines required each State to submit to EPA appropriate review procedures, both long term and short term, to ensure the maintenance of the NAAQS in the future. The State of California has not submitted such review procedures to the EPA, although it is developing them. The Administrator has, therefore, proposed Federal regulations for the review of "indirect sources." These regulations will require the review for effect on air quality of all new large parking facilities, highways, airports, housing developments, and other development and/or construction that may increase automobile emissions because of increased vehicular travel.

The State of California Air Resources Board, under the direction of State Senate Bill 981, is developing an indirect source review procedure. The EPA believes that the review of indirect sources should be at the State and local level. Consequently, when the State submits an approvable procedure, the EPA will rescind any duplicating EPA regulations.

*Review of new highway construction.* Many comments were received on the continued construction of new highways. Urban sprawl is often precipitated by significant highway construction. Section 109(j) of the Federal Aid Highway Act, as amended, 23 U.S.C. 109(j), requires that any new Federally aided highway must be consistent with applicable implementation plans under the Clean Air Act. The "indirect sources" regulations or the State measures that may be approved in their place will be integral parts of these implementation plans.

Such regulations would not be consistent with the requirements of the statute or the court order if they were interpreted to allow construction of major new freeways in heavily polluted urban areas, such as the Century Freeway in Los Angeles.

EPA also reviews and comments on new highway aid projects as part of its review of environmental impact statements under the National Environmental Policy Act (NEPA). 42 U.S.C. 4321-4347.

*Aircraft emissions.* Testimony at every hearing urged some additional controls on emissions from aircraft. Some witnesses, including the California State Air Resources Board, believed that aircraft should be required to reduce emissions by the same amount as automobiles. Witnesses also suggested that if safety factors prevent this amount of emission reduction, that controls be placed on the operation of aircraft. Since restrictions are being placed on the operation of automobiles and possibly motorcycles, witnesses stated that equity considerations justified extending operational controls to aircraft: They suggested that this could be done through changing schedules to permit only full or nearly full planes to take off.

Aircraft emissions represent a significant portion of present emissions, and will become increasingly important as automobile-emitted pollutants decrease. The original transportation control proposal stated that emissions from aircraft engines in 1977 were expected to be somewhat less than the emissions projected by using current emission factors (EPA promulgated aircraft emission regulations in the July 17, 1973, FEDERAL REGISTER (38 FR 19088)). This reduction is due to lower-emission engines that are expected to replace and supplement engines presently in use. Although a reduction is anticipated, the emissions from aircraft are still quite significant. For example, aircraft emissions in San Francisco are projected to account for 34 tons/day of reactive hydrocarbons in 1977. Total allowable emissions of reactive hydrocarbons from all sources must be less than 125 tons/day if the national standard for oxidants is to be

achieved. This plan will reduce emissions to 198 tons/day without gasoline rationing. Aircraft emissions, therefore, will account for 17 percent of the anticipated emissions in 1977.

The EPA believes that the aircraft industry and airlines should continue to promote and, if possible, accelerate the development of engines with lower emission rates, and investigate the possibility of modifying current in-use aircraft engines to reduce emissions. The EPA will continue to assess the feasibility of such controls, and work closely with the Federal Aviation Administration (FAA).

Further reductions in aircraft emissions beyond those that currently effective Federal regulations will provide may be possible through a variety of means. First, EPA has under study the possibility of controlling ground operations at major airports in order to reduce emissions from taxiing airplanes (37 FR 26502, December 12, 1972). Second, portions of the legislative history of the Clean Air Act Amendments of 1970 support the position that States, as part of their implementation plans, can both control such ground operations and also limit the number of flights to given airports. A limitation on the number of flights by a local government acting in its proprietary capacity as the owner of an airport would also appear proper. See *City of Burbank v. Lockheed Air Terminal, Inc.*, 93 S. Ct. 1854 (1973).

*Bicycle usage.* America is experiencing an unprecedented boom in bicycle sales and usage. In 1972 bicycles outsold automobiles, 13 million to 11 million. Bicycle use has doubled in the last 10 years, to approximately 80 million users now.

A preliminary analysis by EPA suggests that increased use of bicycles in urban commuting could reduce auto vehicle miles traveled by as much as 3 percent in areas particularly amenable to bicycle travel.

Public comment received concerning bicycle usage indicated a growing enthusiasm for using the bicycle as a form of transportation particularly suitable for use in commuting to park-and-ride facilities (such as BART stations in the San Francisco Bay Area). The major dis-

incentives to cycling are: High accident rates, exposure to auto pollutants, high bicycle theft rates, and insufficient support facilities. The latter problem tends to cause the previous three.

Such problems could be greatly reduced through better support facilities, segregated bikeways and secure parking arrangements. In addition, such facilities would further promote bicycle usage by improving the convenience of this mode of transportation. Indeed, the ultimate development would be to integrate the bicycle mode with mass transit through parking facilities designed to provide a "feeder" function.

Since 1971, the Department of Transportation (DOT) has been the leader in promoting bicycle use. DOT has allowed States to fund bikeways along federally funded roads using trust fund monies.

In terms of new legislation, the most promising development is the latest amendment of the Federal Aid to Highways Act of 1973 (Pub. L. 93-87). The bikeway section of the Act authorizes \$120 million of trust fund monies to be used for bikeway construction over the next 3 years.

The EPA supports vigorous State and local programs providing for the safe and efficient use of bicycles.

*Air quality baseline.* Testimony was received relative to the method of calculating the emission reductions necessary for attainment of the photochemical oxidant standard. In response to that testimony, the EPA has developed a substantiating methodology which validated the amount of emission reductions necessary. A discussion of this method, titled "Methodology for Determining the Base Year Oxidant Level" will be available shortly from the EPA Region IX office. The resultant calculations based on 3 years (1969-1971) of hourly oxidant data from several localities in each AQCR, showed that the statistically based values varied not more than 0.03 ppm from the maximum values used as the air quality baseline (plus or minus 8 percent). Thus, no substantial change has occurred in the air quality improvement that is necessary. Table 2 compares these statistically based values with the design values used in the plan.

TABLE 2.—COMPARISON OF EXPECTED ANNUAL MAXIMUM 1-HOUR OXIDANT CONCENTRATIONS WITH ACTUAL VALUES USED IN ROLLBACK CALCULATIONS (PPM)

Region	Statistically projected (maximum)	Actually observed (maximum)
Metropolitan Los Angeles	0.60	0.62
San Francisco Bay Area	.33	.36
San Diego	.30	.32
Sacramento Valley	.25	.24
San Joaquin Valley	.26	.24

#### GENERAL DISCUSSION OF THIS PROMULGATION

This section of the Preamble discusses the pollution control measures that are being applied generally in this plan, why they were chosen, and the respects in which they differ from the measures in the proposal. The measures are classified under three headings: "Stationary Source Controls", "Hardware Controls for Vehicles", and "VMT Reduction Measures".

#### STATIONARY SOURCE CONTROLS

For a variety of reasons, EPA looked first to the reductions in emissions that might be achieved by further control of stationary sources. The states and EPA have had significant experience in enforcing similar measures. It can be predicted with confidence that none of these measures will cause any noticeable economic or social disruption even though some burden on individuals may result from them.

*Control of degreasing operations.* The control of degreasing operations regulation is changed from the proposed regulation in the July 16, 1973, FEDERAL REGISTER to reflect the need for continued use of certain degreasing solvents. The control approach in this final regulation

does not ban any particular degreasing solvent. The regulation instead either requires that the discharge be reduced by 85 percent or else requires that the solvent meet a volume composition requirement; it allows no exemption on the basis of the amount or rate of emissions. This regulation is neither to be construed as allowing any lessening of emission reduction requirements specified in any other EPA or EPA-approved rules, nor as negating certain specified allowances or privileges otherwise allowed in the rules.

*Control of dry cleaning solvent vapor losses.* The control of dry cleaning solvent vapor losses regulation is changed from a similar proposed regulation in the July 16, 1973, *FEDERAL REGISTER*. The requirements for vapor removal efficiency and an implementation date now reflect the apparent difficulty encountered in the most likely candidate process for removing the reactive organic vapors encountered in dry cleaning processes. In addition, a volume cut-off point of 4 percent reactive organic material was introduced to allow for tolerances in dry cleaning solvent compositions.

*Gasoline marketing controls.* The gasoline transfer vapor control regulation and the control of evaporative losses from the filling of vehicular tanks regulation were changed from the proposed regulations in the July 16, 1973, *FEDERAL REGISTER* to reflect more recent technical considerations and also the testimony received at the EPA hearings on the proposed transportation control plan. EPA technical staff has indicated that, because of equipment development problems, a time extension should be given for the installation of systems for the control of evaporative losses from the filling of vehicular tanks; this determination is reflected in the final regulations. It is also EPA's present position not to require the installation of gasoline vapor adsorption or refrigeration-condensation systems because of present equipment development and supply uncertainties. Therefore, the control efficiency in both Sections was lowered from 95 percent to 90 percent, so that the installation of vapor balance or vapor return systems can meet the requirements of this rule in

the short-term and more elaborate systems can be installed at a later date. However, it is the opinion of EPA that adsorption and refrigeration-condensation systems will be developed and readily available in the near future, and for this reason, a provision is made that any vapor balance or vapor return system be amendable to add-on retrofit with an adsorption system, refrigeration-condensation system, or equivalent vapor removal system. These more advanced and sophisticated types of vapor removal systems are being developed by industry primarily as a result of stringent gasoline vapor loss control regulations promulgated by San Diego County and by the San Francisco Bay Area Air Pollution Control District. EPA approves and encourages these stringent control regulations and tactics, and supports such vigorous emission control approaches consistent with technology and development considerations.

Testimony was given to EPA that extreme hardship would occur to certain gasoline distributors if small delivery vehicles and certain bulk terminals were required to retrofit with vapor balance or return systems. Taking this into account, EPA has granted an additional year before such retrofit would be required on delivery vehicle compartments that have capacities of 1,000 gallons or less and also certain bulk terminals so that the problem areas can be further analyzed and documented or resolved.

*Organic solvents.* The organic solvent usage regulations and the metal surface coating thinner and reducer composition regulations are modifications of the two proposed organic solvent usage regulations found in the July 16, 1973, *FEDERAL REGISTER*. The implementation date for the 3,000 pound limit restriction in the organic solvent usage regulations has been extended from 1974 to 1976 to reflect the need for lead time required by industry to comply with this restriction. In the high solids and water base incentive portions of the solvent usage rules, an allowance was granted to qualify for exemption presently installed equipment in which solvent comes into contact with flame. The incentive for the use of high solids materials has been liberalized by raising the allowable organic content from 5 percent to 30 percent; this is then

lowered to 20 percent in 1977. Two 8-carbon aromatic hydrocarbons (phenyl acetate and methyl benzoate) were deleted from the photochemically reactive classification, reflecting the results of recent reactivity studies and the guidance presented in the August 14 and November 25, 1971, FEDERAL REGISTERS.

The compliance date for requirements for architectural coatings and their use has been extended to January 1, 1975, to allow suppliers and distributors of these coatings to comply in an orderly manner without severe economic penalties. The special control requirements for metal object surface coatings are no longer in the organic solvent usage regulations, but are now found in a modified form in the section entitled "Metal Surface Coating Thinner and Reducer Composition". This section will result in a significant improvement in organic emissions in metal surface coating operations. Representatives of the paint and coatings industry have expressed a willingness to cooperate in reformulating basic paint compositions so that total solvent composition in the paint, when diluted with solvent thinners and reducers for actual metal surface application purposes, will conform to paragraph (k) of § 52.254 so as to be defined as non-photochemically reactive. After some additional study, EPA expects to propose regulations in the near future to effect a lowering in the reactivity of metal surface coating paint and coatings compositions, after dilution with organic thinners and reducers.

During the course of investigating the use and the effect of certain organic solvent usage rules now in effect in the San Diego, Los Angeles, and San Francisco Regions, which are similar to § 52.254, it appeared that certain parts of § 52.254 deserved reconsideration in terms of eliminating organic emission allowances. This became apparent in terms of a present allowance for uncontrolled organic emissions of up to 40 pounds in any day or 8 pounds in any hour from individual sources. This allowance, for instance, resulted in virtually all automobile body paint refinishing-repair operations neither being required to control emissions nor required to use paints whose compositions meet the non-photochem-

ically reactive composition requirements of § 52.254. EPA will contact the State and local air pollution control districts to elicit comment and further insight into the scope of his general problem, with the goal of proposing additional regulations for the control of stationary source organic emissions.

#### HARDWARE CONTROLS FOR VEHICLE RETROFITS

Comments were received on the feasibility of requiring retrofit emission control devices on existing automobiles. Based on the comments received, the EPA position on retrofits has not changed from the proposed regulations.

Catalytic converters will still be required by 1977 on all light-duty vehicles (which include light-duty trucks) that can run on the octane levels of unleaded gasoline that will be available at that time. Information available to the Administrator indicates that such retrofits are feasible on light-duty trucks and thus a regulation providing for such retrofits is being promulgated.

The California nitrogen oxide, hydrocarbon, and carbon monoxide reduction device program for used cars will be expanded as proposed in the original regulations. Presently available devices basically consist of a controlled vacuum spark advance disconnect. The EPA regulation requires application of the State's present program for 1955 through 1965 model year vehicles to the Sacramento and San Joaquin Regions. The present State program exempts these regions from this retrofit program.

*Inspection/maintenance programs.* Considerable reductions in motor vehicle emissions can be achieved by requiring all vehicles in an area to be tested annually for emissions, failing those emitting pollutants that exceed a certain level, and requiring maintenance on those that fail in order to bring them into compliance. This process is called "inspection and maintenance" throughout this discussion.

Three different types of tests are possible. The car can be tested while running in gear on a treadmill-like device called a "dynamometer" (a "loaded test"); it can

be tested while running in neutral (an "idle test"); or certain emission-related engine components can simply be examined to make sure they are in good working order ("parameter" inspection). A loaded test is the most effective and most expensive; parameter inspection is the least effective and least expensive. Since an inspection and maintenance program cannot be expected to achieve maximum effectiveness in reducing emissions unless a loaded test is adopted, EPA is requiring its adoption.

The State of California is proceeding with an inspection/maintenance system that will result in emission reductions. This plan will require that the State's inspection/maintenance system be expanded to require mandatory inspection and maintenance of all light-duty motor vehicles in Regions covered by this proposal. The inspection and maintenance program recently adopted by the State may be applicable to light-duty vehicles only in the Los Angeles Region. EPA has determined that extension of inspection/maintenance program to light-duty trucks is technically and administratively feasible because they are in many respects similar to light-duty vehicles.

*Gaseous fuel usage.* Using compressed natural gas (CNG) and liquified petroleum gas (LPG) for the fueling of internal combustion engines significantly reduces the emissions those same engines would produce if gasoline powered. The EPA encourages the use of gaseous fuel, particularly LPG, for fleet vehicles.

The Agency believes that those automobiles unable to run on unleaded gasoline and, therefore, unable to be retrofitted with catalyst exhaust systems, should possibly be converted to gaseous fuels. Because of the distribution problems and the anticipated effectiveness of catalytic mufflers, however, the Agency is not requiring gaseous fuel conversion. Nevertheless, those fleet owners and individual auto owners who have installed such conversion systems before the effective date of the catalyst retrofit program will be exempt from the requirements of that program.

Transit agencies should consider the advantages of gaseous fueling of buses rather than either gasoline or diesel power systems, prior to the purchase of these vehicles.

#### VMT REDUCTION MEASURES

*Motorcycle controls.* In the July 16, 1973, proposal, regulations were included that would have restricted 2-stroke motorcycle operation during the "smog season" in California. This action was taken due to the very high pollution potential of the 2-stroke motorcycle. The average 2-stroke motorcycle emits approximately 31 times as much exhaust hydrocarbons per mile as a new California 1975 automobile will emit. Consequently, prevention of increases in the number of motorcycles was proposed to prevent counter-productive shifts from automobiles to motorcycles as a result of other elements of the control strategy. The Agency has evaluated the feasibility of establishing emission standards for new motorcycles and is currently evaluating the availability of motorcycle emission control technology for existing motorcycles to reduce emissions.

Based upon testimony presented by motorcycle manufacturers, testimony presented by motorcycle trade associations, and an independent analysis by the Environmental Protection Agency, it appears that significant reductions in the emissions from new motorcycles can be achieved.

Accordingly, the EPA is no longer requiring an unconditional ban on motorcycle operations. Instead, the ban regulation has been rewritten to provide that it will not go into effect in the event that nationally applicable Federal regulations are promulgated that require at least a 50 percent reduction of 2-stroke motorcycle hydrocarbon emissions by 1976 and conformity with the 1976 hydrocarbon automobile standards by 1979 for both 2-stroke and 4-stroke vehicles. Significant reductions for carbon monoxide will also be required.

The Administrator will soon issue an Advance Notice of Proposed Rulemaking for emission standards for new motorcycles.

*Bus and carpool lanes.* The original proposal for the establishment of bus and carpool lanes has been retained in substance. However, the method of selecting the lanes has been changed from one based on the number of lanes in the road to one looking to the establishment of a coherent network of such lanes along transportation corridors. In some regions, pilot programs will be conducted to discover the best way to implement a full-scale program. EPA recognizes that in some cases, measures such as freeway metering or the conversion of entire streets to bus and carpool use may prove preferable to such lanes. In every case, however, the establishment of bus/carpool lanes will proceed on the schedule specified unless and until other measures of equivalent stringency can be substituted for them.

*Parking management program.* The proposal for review of new commercial parking facilities has been retained in essence. It has been modified, however, to allow a wider range of variables to be considered. In essence, the regulation promulgated today would require the obtaining of a permit before commencing the construction of any facility of 50 or more spaces. A permit will only be granted after it is determined that the parking facility will not have an effect inconsistent with a plan's VMT reduction goals or cause a violation of any ambient air quality standard.

The promulgated regulations will encourage as an alternative to one-by-one review of new facilities that the appropriate local government submit to the Administrator a plan outlining the locally planned management of parking facilities for the next 5 years. If a submittal is made that shows to the satisfaction of the EPA that such planned parking management does not conflict with the California State Implementation Plan, the EPA will no longer review each proposed new parking facility individually. Such review by either the State or EPA will be consistent with the previously discussed indirect sources regulations.

*Control of existing parking spaces; surcharge on parking.* The proposal that spaces in public parking facilities be reduced by 20 percent drew almost universal adverse comment during this rulemaking proceeding. At the same time, the use of regulatory fees to discourage pollution-causing activities was widely supported. In particular the use of fees to control parking was mentioned.

EPA also believes that the use of such parking fees has much to recommend as a matter of policy. Accordingly, EPA is not promulgating a reduction in publicly owned parking spaces and is instead promulgating a regulatory fee to increase the price of parking in the three most heavily polluted AQCR's. Both the regulation's geographic coverage and the amount of the surcharge will be increased in three phases. At least 50 percent of the revenues will be used for mass transit.

In addition, testimony at the public hearings pointed out that the provision of parking spaces by employers for their employees tends to encourage employees to drive to their place of employment rather than use carpools or mass transit. Such employers may therefore be regulated as "indirect sources" of air pollution as that term is defined in the General Preamble. At the same time, individual employers are particularly well equipped to establish and administer programs to reduce the dependence of their employees on the single-passenger automobile. Accordingly, as a further replacement for the proposed reduction in public parking spaces, a regulation is being promulgated that provides for employer-paid mass transit fares and special parking privileges to those who travel by carpool. It also provides for a surcharge over and above the commercial parking rate to be assessed on those who continue to commute by single-passenger automobile. The revenues from this surcharge will be used by each employer to promote use of mass transit.

This regulation will be implemented in stages, the first stage applicable to employers who provide more than 700 employee parking spaces, and the second to those who provide more than 70.

The purpose of this regulation is to effect sizeable reductions in VMT caused by commuting, which ap-

pears to be the mode of travel most easily diverted to mass transit and carpools.

This regulation also contains a provision restricting the enforcement of local zoning or land-use laws that require an employer to provide a given number of parking spaces for a given number of employees.

EPA was reluctant to interfere with local land-use decisions even to the limited extent that today's regulations provide. However, in light of the relationship among parking spaces, vehicle miles traveled, and air quality, a requirement that employers must provide a certain number of parking spaces could not be squared with the objectives of the Clean Air Act.

It should be emphasized, however, that the Agency recognizes that many aspects of the surcharge and employer incentive regulations are new and indeed unprecedented. They are being promulgated because of the requirement of the court order that all measures necessary to move towards the standards be included in the plans as promulgated. Even though promulgation was necessary to make these regulations legally effective, the Agency particularly invites public comment on them during the next 30 days. At the conclusion of that period, and after comments have been evaluated, the regulations will be revised if revision is appropriate in the light of the comments.

EPA also recommends that local jurisdictions consider whether present legal requirements unduly hamper shifts away from the present dependence on automobiles. Regulations such as those which require that any bus service obtain a certificate of public convenience and necessity before commencing operations may significantly discourage increased public transit service.

*Carpooling systems.* In all Regions, EPA is requiring the establishment of carpool matching systems to enable persons with similar daily travel patterns to make contact with each other and arrange carpools. In some regions, pilot programs will be established prior to establishment of the system throughout the region. Such a measure is necessary if the restraints on individual ve-

hicle use contained in this plan are to have the desired effect of reducing VMT.

The EPA Regional Office in San Francisco has contacted various Federal agencies in order to facilitate the implementation of the pilot programs called for in the regulation. The Regional Office has experienced initial success in its first contacts, and this effort is continuing. A detailed guide for the operation of a bus/carpool matching program, along with a discussion of a number of successful programs in operation in many areas of the country are discussed in a U.S. Department of Transportation Federal Highway Administration Publication "Carpool and Buspool Matching Guide (Second Edition)", May 1973. This report discusses the considerations involved in a successful program such as public information, incentives, data processing, and a continuing updating of the service, and is an excellent guide and reference for conducting such a program.

The EPA believes that this approach to reducing vehicle miles traveled is an excellent short-term strategy. It involves a minimum investment and deserves the active promotion and support of government and industry.

*Gasoline limitations.* As noted above, the Clean Air Act leaves the Administrator no alternative to promulgating all measures necessary to meet the standards by 1977. Accordingly, the plan also contains a provision for reducing the supply of gasoline to the extent necessary to ensure attainment of the standards by that date. Such a measure, if implemented, would achieve the air quality standards. However, the EPA does not believe that massive gasoline rationing is either socially acceptable or enforceable, and will work toward alleviating the necessity for such drastic control in 1977.

*State, local, and Federal implementation of control measures.* In order to preserve the intent of the Clean Air Act that pollution problems be dealt with primarily at the local level, the Agency is requiring that State and local governments take action wherever possible and will involve the Federal Government only in the direct implementation of some programs. State and/or locally enforced, Federally promulgated requirements include:

Retrofit programs; parking surcharge; bus and carpool lanes; and inspection and maintenance. Federally operated programs will be: motorcycle controls, gasoline limitations, and a bus/carpool incentive regulation directed at major employers.

#### STATE AND REGIONAL RESPONSIBILITIES

The State of California has recently redesignated some of the responsibilities of the California Air Resources Board (ARB). The ARB has the responsibility of developing and submitting implementation plans to achieve State and Federal air quality standards. When these plans require transportation controls that are not hardware devices, the California Department of Transportation (Cal/Trans) is responsible for the planning and development of these transportation control measures. The California Department of Transportation has informed EPA that it will submit alternative transportation plans for each AQCR based on the findings of State and local task forces.

*State/local task forces.* State/local task forces were formed in all AQCRs covered by this promulgation to develop alternatives to the EPA-proposed control measures, with the goal of developing draft plans by mid-October, 1973. Meetings were held between each task force and EPA representatives to discuss potential alternatives for inclusion in the EPA control plan promulgated for each AQCR. Although the EPA promulgations are not wholly comprised of recommendations of the task forces, EPA hopes that they reflect reasonable and locally acceptable measures to improve air quality in each AQCR. EPA also hopes that the recommended alternative plans being developed by the task forces later this fall will be approvable by EPA and will allow EPA to rescind its regulations.

The membership of the task forces follows:

*Los Angeles.* District VII Cal/Trans, California Air Resources Board, City and County of Los Angeles, California Highway Patrol, Southern Califor-

nia Association of Governments, Los Angeles County Air Pollution Control District, Southern California Rapid Transit District, South Coast Air Basin Coordinating Council, and the League of California Cities.

*San Francisco.* District IV Cal/Trans, California Air Resources Board, San Francisco Bay Area Metropolitan Transportation Commission, Association of Bay Area Governments, and the Bay Area Air Pollution Control District.

*San Diego.* District XI Cal/Trans, California Air Resources Board, San Diego Comprehensive Planning Organization (CPO), San Diego County Office of Environmental Management, San Diego County Air Pollution Control District, City of San Diego, the San Diego Unified Port District, and San Diego Transit Corporation.

*San Joaquin Valley.* Cal/Trans, California Air Resources Board, Regional Fresno Community Council, local transit officials, and county, city, and governmental bodies, including the Fresno County Air Pollution Control District.

*Sacramento Valley.* Cal/Trans, California Air Resources Board; Sacramento Regional Area Planning Commission, Sacramento and Yolo Solano Air Pollution Districts, county, city, and regional governmental bodies, and Sacramento Regional Transit District.

#### SOCIAL AND ECONOMIC IMPACT OF THE CONTROLS

A full analysis of the social and economic effects of the transportation control plans has not been made, because of the lack of time and because of the innate complexity of the problem. Many factors, such as the willingness of the public to use mass transit instead of the automobile for some trips, cannot be predicted. However, preliminary analysis has outlined some general trends and impacts.

The impact of stationary source controls is most easily predictable. Where manufacturing and marketing of certain goods and services require control devices or new distribution techniques, the cost of the devices and techniques will probably be passed on to the consumer. The requirements for vapor recovery in gasoline marketing will likely result in conservation of energy since gasoline, which previously was lost as vapor, will be recovered and used.

The program requiring inspection and mandatory maintenance of light-duty vehicles will involve two kinds of costs: (1) An inspection fee of about \$2 for all vehicle owners; and (2) the cost of the required maintenance for vehicles failing the inspection, about \$20 to \$30. These costs are low, but they may fall most heavily on the owners of older cars, and these tend to be from the lower income groups. The cost of retrofit devices will vary according to the device required. Vacuum spark advance disconnect (VSAD) and exhaust as recirculation devices can be purchased and installed for \$20 to \$35, and an oxidizing catalyst will cost approximately \$150. Again, the cost of retrofit devices will fall most heavily on the lower income groups, since they tend to own older, less-controlled automobiles. The cost of both inspection/maintenance and retrofit can be subsidized by State or local government through systems of taxing or fees. In the absence of subsidies or other relief, lower income groups will bear a disproportionate part of the burden of these costs.

Many control measures are designed to provide incentives for the use of mass transit. Preferential treatment of buses and carpools on freeways and city streets, incentives to employees to use mass transit, financing for mass transit, and management of parking facilities should make the use of buses and carpools more easy and attractive. This would result in a more balanced system of transportation, available to the entire public. It will necessarily cause some inconvenience and delay in the driving of private automobiles until the public shifts some trips from automobiles to mass transit. Increased

ridership has been found to be a vital factor in improved bus service, and it is hoped that the regulations promoting the use of mass transit will lead to an improved system, which in turn is even more attractive. Improvements in public transportation will most benefit the poor, the old, and the young, so-called "captive" riders, although commuters should also benefit from preferential treatment of buses and carpools on highways and city streets. Improved public transit may also uncover and serve a latent trip demand in the present users of public transit.

It is also important to reiterate that the enforcement of the transportation control regulations will remove the present and future danger to public health from photochemical smog and carbon monoxide. This will result in better health among the affected population, greater human productivity because of elimination of some sick-days, and protection of the health of marginal groups.

*Study of social and economic impact on San Diego AQCR.* EPA has recently contracted the firm of Peat, Marwick, Mitchell, and Company of Washington, D.C., to conduct an initial socioeconomic impact study of the EPA-promulgated regulations for the San Diego Air Quality Control Region. The study will assess in particular the several transportation control measures initially promulgated and then project the socioeconomic effects of such controls, if extended into additional phases. In addition to providing specific information on the San Diego plan, this study should provide a systematic methodology for assessing socioeconomic impacts in the other metropolitan areas of the country requiring transportation controls to meet air quality standards. Subcontractor support will be provided by the San Diego Comprehensive Planning Organization (CPO). In addition to CPO, coordination and technical review will be provided by the San Diego County Office of Environmental Management and the San Diego County Air Pollution Control District.

*Public information grants.* EPA realizes that no control program can work without public understanding and public support. The Agency is most anxious that the

public be aware of the real public health need for transportation controls, and aware of the alternatives to the private automobile. It also desires strongly that the public have readily available routes of communication to EPA, and that they present their criticism, suggestions, and desires.

Besides its normal public affairs activities, publications, and contacts with groups and individuals, EPA is sponsoring a special public information campaign on the transportation controls. In this campaign, local community-based and civic groups will provide the public with information on the controls themselves, on the options communities have to ease the impact of and the need for the controls, and on the alternatives to the automobile, particularly mass transit. The local groups will work through both the media and through community meetings and involvement.

Those interested in obtaining information from these groups or participating in their efforts should contact the following groups:

Fresno: The Fresno Community Council, 208 Crocker Citizen's Bank Building, Fresno, Calif. 93721.

Los Angeles: The Clean Air Constituency, 1670 Beverly Boulevard, Los Angeles, Calif. 90026.

Sacramento: The League of Women Voters, 3140 "J" Street, Sacramento, Calif. 95816.

San Diego: Integrated, Regional Environmental Management, 1600 Pacific Highway, San Diego, Calif. 92101.

San Francisco: The League of Women Voters, Hotel Claremont, Berkeley, Calif. 94705.

#### SOUTHEAST DESERT INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The Southeast Desert Intrastate Region, also known as the Southeast Desert Air Basin, is located in the southeast portion of the State of California. It is composed of all of Imperial County, the eastern portions of San Ber-

nardino, Riverside, Kern, and San Diego Counties, and the northern portions of Los Angeles County. Geographically, this Region covers 33,600 square miles and is separated from the coastal regions by a series of mountain ranges. Elevations vary from 235 feet below sea level to 11,000 feet above sea level.

Air quality monitoring stations in the Region and in particular those in the Coachella Valley have recorded photochemical oxidant levels up to five times the national ambient air quality standards. The overall 1971 maximum readings in the Region are 0.38 part per million oxidants (recorded in Palm Springs) and 17 parts per million carbon monoxide (recorded in Indio). Using simple rollback and assuming a linear relationship between reactive hydrocarbons and oxidant concentrations, the reductions required to achieve the national standards are 70 percent of the reactive hydrocarbons and 47 percent of the carbon monoxide.

Significant data support the hypothesis that air pollution from the Metropolitan Los Angeles Intrastate Region is transported to and contributes substantially to high oxidant levels in the desert areas east of Los Angeles. It is expected that the emission controls proposed by the Administrator for the Metropolitan Los Angeles Region, in addition to State and local emission controls, will provide for attainment of the carbon monoxide and photochemical oxidant standards in the Southeast Desert Region by May 31, 1977. Any delay experienced in attaining the oxidant and carbon monoxide standards in the Los Angeles Region will cause a corresponding delay in attainment of the standards in the Southeast Desert Region.

A discussion of studies relating the air quality in the Southeast Desert Region to that in the Los Angeles Region can be found in "Air Quality Implementation Plan Development for Critical California Air Quality Control Regions: Summary Report," prepared under contract for the Environmental Protection Agency and available from the EPA Region IX office at 100 California Street, San Francisco, California 94111.

Because of the dependence of air quality in the Southeast Desert Region upon that in the Los Angeles Region, and because of the very small impact that emissions in the Southeast Desert Region have upon air quality there, no transportation controls are promulgated for this Region at present.

#### METROPOLITAN LOS ANGELES INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The Metropolitan Los Angeles Air Quality Control Region, also known as the South Coast Air Basin, covers a major portion of Southern California, encompassing all of Orange and Ventura Counties, the western portion of Riverside County, the southwest portion of San Bernardino County, the southern coastal portion of Santa Barbara County, and all but the northeastern corner of Los Angeles County. The air quality problems of the region are, in many ways, unique. The region is geographically and meteorologically closed. The encircling mountains and frequent inversions, hold in pollutants, and the Southern California climate provides ample sunshine to aid the formation of photochemical smog. The automobile is by far the dominant mode of transportation. In 1972 the South Coast Air Basin contained over 10 million persons and nearly 6 million motor vehicles.

This extremely high automobile population is combined with a low-density, sprawling pattern of development that distributes the population over the entire area of the basin, linked by a complex network of freeways. Moreover, the area is still growing. The current rate of population growth is now a 1.7 percent increase per year. However, the automobile population grows more rapidly, at 3 percent to 4 percent per year, and gasoline consumption grows even more quickly, at 4.5 percent per year.

This AQCR has the worst photochemical oxidant problem in the United States. In 1970, the national standard for photochemical oxidant was exceeded on over 250 days in the South Coast Basin. The high reading in the Basin was over 7 times the national standard, and during 1970

a full 10 percent of the oxidant readings taken in the Basin were 0.40 ppm (five times the national standard) or higher.

In 1970, a high reading for photochemical oxidants of 0.62 ppm was taken at Riverside, and this reading is being used for air planning purposes.

Testimony was received that was critical of the procedures that EPA employed in selecting the maximum 1-hour reading for use in the rollback calculations. In response, EPA evaluated 3 years of air quality data at several locations within the South Coast Intrastate AQCR and found that the statistically evaluated maximum 1-hour value was 0.60 ppm. This value was only 0.02 ppm different from the value used to calculate the emissions reductions tabulated in the original proposal, and therefore has little or no effect on the VMT reductions required. A high carbon monoxide 8-hour average reading of 41 ppm was taken in 1970, and that reading is being used for air planning purposes. The overwhelming majority of the hydrocarbon and carbon monoxide emissions in the Basin are from motor vehicles. Besides stringent controls on stationary sources and requirements for emission controls on motor vehicles, a reduction in vehicle miles traveled (VMT) by the entire population of automobiles will be necessary to meet the oxidant standard in 1977. It should be pointed out that EPA estimates that some of the emission control strategies for motor vehicles, e.g., installation of catalytic mufflers, cannot be fully carried out before 1977.

*Discussion of final EPA control strategy for metropolitan Los Angeles AQCR.* The control strategy for the Los Angeles Region consists of various stationary and mobile source controls. Many of the stationary source controls are the same or slightly modified versions of the regulations proposed in the July 2, 1973, FEDERAL REGISTER. The transportation control measures have been modified considerably. The measures reflect testimony received at the August 9-10, 1973, public hearings in Los Angeles and written comments received on the plan. Additionally, various State and/or locally implemented controls are

noted as part of the total strategy, but not claimed as part of the EPA plan reductions. EPA will carefully assess the reductions in VMT and improvements in air quality obtained from the various strategies and control regulations, and recommend additional or revised strategies as needed.

The requirements for bus/carpool lanes and review of parking facilities are also being promulgated essentially as proposed, although significant changes in form have been made. Approximately 184 miles of traffic lanes, in two phases, will eventually be set aside for buses and carpools under this promulgation. Measures to require employers to discourage commuting by single-passenger automobiles, and to require the establishment of a regional carpooling system, have been added. The proposal for a reduction in public parking spaces has been dropped, and a regulatory fee to increase the price of parking has been added. The provision for gasoline limitations prior to 1977 has been eliminated. The ban on motorcycles during the smog season will not take effect as promulgated if emission standards for new motorcycles are established.

As an initial phase, some 65 miles on 3 freeway corridors have been designed for establishment of exclusive bus and carpool lanes, and another 12 miles of surface streets have been designated for the same purpose. The choice of specific routes was made at the recommendation of the Los Angeles Task Force and other testimony received at the public hearing, discussed earlier.

The proposal to require a bus/carpool computer matching and promotion system by March, 1974, has been modified to require a phased computer matching program that will initially involve employees in the Los Angeles City CBD and eventually expand to include all employees in the Region.

The control tactics (including such details as the emission control reduction factors and the population fraction affected by the tactics), and other data needed to calculate the emission inventory outlined in Table 3 are outlined or referenced in the appendix of the Technical Support Document for the Metropolitan Los Angeles In-trastate Air Quality Regional Transportation Control

Plan—Final Promulgation, available from the EPA, Region IX Office at 100 California Street, San Francisco, California 94111, and at the Freedom of Information Center, EPA, 401 M Street SW., Washington, D.C. 20460.

Many of the measures EPA and the local task force have designed to reduce VMT are untried. EPA has gathered the available data and has funded several studies and analyses of the VMT reductions possible from various transportation control; based upon the available data, EPA has made rough estimates of the VMT reductions that can reasonably be expected from the EPA and local measures. The EPA strategy for the Metropolitan Los Angeles AQCR should yield reductions of between 14 and 31 percent. (These and subsequent calculations can be found in the Technical Support Document, available at the Region IX and Washington offices specified above.) It should be noted that EPA has promulgated many of the local measures and therefore the 14 to 31 percent VMT reduction reflects these task force measures. An additional VMT reduction of 3 to 12 percent would result from other task force recommended measures. Based on present data, the remaining VMT reduction can only be achieved by means such as gas rationing.

TABLE 3.—SUMMARY OF IMPACT OF CONTROL STRATEGIES  
IN THE LOS ANGELES AQCR IN 1977

Emission source and control measures	Emissions and reductions of RHC, tons/day	Percent reduction per measure
Stationary source emissions in 1977 without proposed control strategy	236	
Expected reductions:		
1. Vapor recovery at gasoline stations	—132	18.0

TABLE 3.—SUMMARY OF IMPACT OF CONTROL STRATEGIES  
IN THE LOS ANGELES AQCR IN 1977—Continued

Emission source and control measures	Emissions and reductions of RHC, tons/day	Percent reduction per measure
2. Dry cleaning solvent controls and degreasing solvent controls	—32	4.3
Stationary emissions remaining	72	
Mobile source emissions in 1977 without proposed control strategy	613	
Expected reductions:		
1. Reductions from only EPA-promulgated VMT control strategies assuming a 14% VMT reduction <sup>1</sup>	—61	8.3
2. Catalyst retrofit, and mandatory inspection and maintenance	—103	14.0
3. Motorcycle limitations	—24	3.3
4. VMT reductions and evaporative emission reductions necessary from additional control strategies to be implemented in 1977	—384	52.1
Mobile emissions remaining	41	
Total emissions remaining	113	
Total emissions allowable <sup>2</sup>	112	

<sup>1</sup> Using optimistic assumption and estimations of both EPA and local VMT reduction measures, a total reduction of 43 percent VMT, or 187 tons/day could occur.

<sup>2</sup> Based on the "Schuck Model" which is described in the "Los Angeles Technical Support Document."

*Locally implemented controls.* A task force, discussed elsewhere in this preamble, was formed in the Los Angeles area to develop alternatives to the EPA plan. The task force has since made several preliminary recommendations for local actions that could reduce emissions both by developing a better, more widely used public transportation system, and by smoothing and speeding the flow of automobile traffic. The Task Force report states that a long-range and a short-range plan to expand public transit services and facilities are being drawn up now by member agencies of the task force. EPA supports the goals of these plans: To provide an alternate form of transportation to absorb trips diverted from the automobile, and to develop a more balanced transportation system in the South Coast Basin. We expect to cooperate closely with the task force members in drawing up these plans.

The task force recommended a series of measures to speed the flow of traffic and avoid the bottlenecks and stop-and-go driving that are both polluting and wasteful of energy. These measures include: Automated and interconnected traffic signals; freeway ramp metering; expanded fringe park-and-ride facilities; and other traffic flow improvements. The task force believes these systems can speed traffic, cut emissions, and conserve energy.

The task force recommendations have not been adopted as enforceable regulations and submitted to EPA as part of the California Air Quality Standards and Implementation Plan. However, EPA encourages the adoption submission of these recommendations as part of the State plan.

#### SACRAMENTO VALLEY INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The Sacramento Valley Intrastate Air Quality Control Region, also known as the Sacramento Valley Air Basin, lies in the center of Northern California, bounded on the west by the Coast Range, on the north and east by the

Cascade Range and Sierra-Nevada Range, and on the south by the San Joaquin Valley. This region is composed of portions of 15 counties. The Region contains approximately 21,300 square miles, 1.2 million people, and 840,000 motor vehicles. Air pollution control in the Region falls under the jurisdiction of the local air pollution control districts. As in the rest of the State, the local and regional organizations deal primarily with stationary source controls, leaving mobile source controls to the California Air Resources Board.

During the period 1970 to 1972, the Sacramento Valley Region experienced numerous violations of both Federal and State air quality standards. Photochemical oxidants are the predominant problem, and it appears from the limited data evaluated that the problem has increased in recent years, both in number of violations that occur and the maximum oxidant level experienced. Based on the highest or base year 1-hour maximum oxidant reading of 0.28 ppm during 1972 in Sacramento and using the proportional rollback model, a 71 percent reduction in reactive hydrocarbon emissions from 1972 base year emission levels would be required to meet the national ambient air quality standard for oxidants. (The maximum oxidant reading used was evaluated by the method described earlier in the Metropolitan Los Angeles preamble, and was found to be substantially correct).

Since the air quality levels are most severe in the southern portion of the Region, centering around Sacramento County, it appears appropriate to attempt to solve the airshed problem by developing a control strategy specifically for Sacramento County and the three counties in its immediate vicinity (Yolo, Placer, and El Dorado). In the Sacramento Valley and also the San Joaquin Valley, vast areas are sparsely populated but others are highly urbanized and have high emission densities in comparison with the rural areas. Thus, most transportation control strategies are limited to these urbanized areas.

Table 4 summarizes the effects of the promulgated control strategies.

TABLE 4. SUMMARY OF IMPACT OF CONTROL STRATEGIES IN SACRAMENTO "REGIONAL AREA" IN 1977

Source of pollutant and control measures	Emissions and reductions tons/day of reactive hydrocarbons	Percent reductions per measure
Stationary source emissions in 1977 without control strategy	40.6	
Expected reductions:		
1. Gasoline marketing vapor recovery	-26.0	43.0
2. Surface coating improvements	-1.1	1.6
3. Dry-cleaning controls	-0.7	1.2
4. Degreasing controls	-1.9	3.2
5. State limitations on burning	-2.1	3.4
Stationary emissions remaining	8.8	
Mobile source emission in 1977 without proposed control strategy	54.1	
Expected reductions:		
1. Reductions from only EPA-promulgated VMT control strategies assuming a 5 percent VMT reduction <sup>1</sup>	-1.7	2.7
2. Catalyst retrofit, mandatory inspection/maintenance program, and vacuum spark advance program	-9.9	6.2

<sup>1</sup> Using optimistic assumptions and estimations of both EPA and local VMT reduction measures, a total reduction of 27 percent VMT, or 9.2 tons/day could occur.

TABLE 4.—SUMMARY OF IMPACT OF CONTROL STRATEGIES  
IN SACRAMENTO "REGIONAL AREA" IN 1977—Continued

Source of pollutant and control measures	Emissions and reductions tons/day of reactive hydro- carbons	Percent reduc- tions per measure
3. Motorcycle emission regulations	—2.0	3.3
4. VMT reductions necessary from additional control strategies to be implemented in 1977	—15.3	25.4
Mobile emissions remaining	25.2	
Total emissions remaining	34.0	
Allowable emissions to attain standards for photochemical oxidants. <sup>a</sup>	34.5	

<sup>a</sup> Based on linear rollback model.

VMT will have to be reduced by 64 percent if the national ambient air quality standard for photochemical oxidants is to be attained by 1977 in the Sacramento Valley Region.

Based upon the available data, EPA has made rough estimates of the VMT reductions that can reasonably be expected from the EPA and the local measures. The EPA strategy for the Sacramento Valley Intrastate AQCR should yield reductions of between 45 and 14 percent; the local measures should provide an additional 4 to 13 percent improvement in air quality. It should be noted that EPA has promulgated many of the locally supported measures, and therefore the 5 to 14 percent VMT reduction includes the effects of these measures.

An additional VMT reduction of 4 to 13 percent could result from additional locally implemented measures. Based on present data, the remaining reduction needed can only be achieved through more stringent measures, such as gasoline rationing, in 1977.

*Discussion of final EPA control strategy for the Sacramento Valley.* The control strategy for the Sacramento Valley Region consists of various stationary and mobile source controls designed to reach the photochemical oxidant standard by 1977. Many of the stationary source controls are the same, or slightly modified versions, of the regulations proposed on July 16, 1973. The transportation control measures have been modified considerably. Each of the regulations promulgated or approved is considered to be enforceable by the Agency.

The measures reflect testimony received at the August 10, 1973 public hearing in Sacramento and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy to achieve the standard by 1977. EPA will carefully assess the reduction in VMT and improvements in air quality obtained from the various strategies and control regulations, and recommended additional strategies as needed between now and the 1977 legal attainment date.

The proposal to achieve a bus/carpool computer matching and promotion system by March of 1974 has been modified to require that such a system be initially established at McClellan Air Force Base in Sacramento. Upon evaluation, the system will be expanded throughout the portions of the Regions.

A "Mass Transit Priority and Planning" regulation for a four-county portion of the Sacramento Valley Region has been added to the control plan. The Sacramento Regional Area Planning Commission (SRAPC) July 1972 report "Transit Plan and Program", states that the Sacramento City "J" Street bus and traffic situation justified bus priority treatment. In addition, SRAPC reports and discusses at the meetings between EPA and the Task Force indicate that there is a near term po-

tential for mass transit priority treatment (e.g. U.S. 99 through Southern Sacramento). As a result, EPA has promulgated final regulations calling for specific action in the "J" Street situation, and a general action outline plan for mass transit priority treatment on streets and freeways.

Surcharges on public and private parking have not been imposed in the urbanized portions of the Sacramento Valley Region as they have in San Francisco, San Diego, and Los Angeles. However, the use of such a surcharge to raise revenues for mass transit is being considered by the Administrator, and written comment on this point is particularly invited.

*Locally implemented strategies.* The public hearing testimony, written comments, and the Sacramento Task Force indicated a wide variety of measures that could best be carried out on the local or State level. The EPA plan notes these measures as being applicable toward attainment of the oxidant standard and will encourage their implementation, although the reductions are not credited as part of the EPA plan. Furthermore, EPA will evaluate progress and success in the implementation of these and similar measures and if found necessary, promulgate additional measures to supplement them. Many of these measures will likely be contained in the anticipated revisions to the State Implementation Plan as a result of the Cal/Trans task force findings.

Major improvements to the mass transit system in Sacramento have occurred during the past year and are expected to be expanded as additional funds become available for these purposes.

A meeting between EPA and the transportation task force officials confirmed that the Sacramento Regional Transit District had initiated and is in the process of implementing an innovative and aggressive transit program. It is expected that the State of California Department of Transportation vehicle miles traveled reduction plan to be submitted to EPA will further define this program, and will allow EPA to monitor and evaluate the progress of future public mass transit program implementation, including the present and estimated future

financial commitment to mass transit. The Sacramento Regional Transit District initiated a 25¢ flat fare recently, and bus ridership has dramatically increased since that time. Express bus routes to outlying areas of the metropolitan area were established in the past year and several more will be in operation by the end of 1977. Fringe parking lots have been established and are being expanded along these routes as well as at major regional shopping centers. There are plans to place bicycle protection facilities at these fringe parking lots to allow nearby residents to bicycle to the bus stops. Bikeways are very extensive in the Sacramento area due to the flat terrain. Ridership incentive programs are being planned through an extensive public information program. Dial-A-Bus and subscription bus service will also be carefully examined. An area being seriously examined for applicability of special bus service is the route between the University of California campus at Davis and certain residential areas in the city of Sacramento, 18 miles away.

Various traffic flow improvement programs are also underway or proposed for the next 4 years in the Sacramento Region. These include a synchronized traffic signal system for major arterials, easing of traffic bottlenecks, and additional ramp metering.

A final measure that will likely be the subject of further consideration and experimentation in the next few years will be the variation of the work week to four 10-hour days, and other combinations to determine the effects of the variations on air quality and VMT. Governmental agencies will be early candidates for this program.

#### SAN JOAQUIN VALLEY INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The San Joaquin Valley Intrastate Region, also known as the San Joaquin Air Basin, consists of all of the counties of Amador, Calaveras, Fresno, Kings, Madera, Mariposa, Merced, San Joaquin, Stanislaus, Tulare, and Tuolumne, and the western portion of Kern County.

This Region lies in the southern portion of the Central Valley and extends into the neighboring mountain slopes. It is bounded on the west by the Coastal Range, on the east and south by the Sierra-Nevada and Tehachapi Mountains, respectively, and on the north by the Sacramento Valley Intrastate Region. The Region includes 30,200 square miles of land area and had a population of over 1.6 million people in 1970. Population is growing rapidly. Although it contains 19 percent of the State's land area, the Region has only 8 percent of the State's population. National ambient air quality standards have been exceeded in seven locations in the San Joaquin Valley Region: Stockton, Fresno, Bakersfield, Modesto, Visalia, Parlier, and Five Points. The highest or base year 1-hour maximum oxidant value of .24 ppm occurred in the Region in 1971 at Modesto. The base year maximum oxidant reading used was statistically evaluated by the method described earlier in the Metropolitan Los Angeles preamble, and was found to be substantially correct. Each of the areas surrounding the cities has unique characteristics with regard to air quality, meterology, stationary sources, population distribution, and transportation; the transportation control strategy proposed herein recognizes this fact. A thorough analysis was made on Kern County (Bakersfield), Fresno County (Fresno), and San Joaquin County (Stockton). Insufficient data exist for adequate analyses of Parlier and Five Points (both in Fresno County and Modesto), but it is expected that the proposed transportation controls as applied to Fresno, Bakersfield, and Stockton areas will be adequate for attainment of the national ambient air quality standard for photochemical oxidants in these other locations as well.

Using the proportional rollback model, reductions in base year emission levels of reactive hydrocarbons of up to 67 percent (for Modesto) will be required in various counties in the Region in order to meet the air quality standards.

As an example, Table 5 shows the approximate effect that the control strategies will have in Kern County.

A 39 percent reduction in VMT is necessary by 1977 for attainment of the standards in Kern County. In

Stanislaus County a similar situation exists with a corresponding need for VMT reduction. In Fresno County, present studies indicate that a 16 percent VMT reduction by 1975 would provide for attainment of the standards. In San Joaquin County, a 32 percent VMT reduction is necessary in 1975 for attainment of the standards, but only 8 percent in 1977.

Based upon the available data, EPA made rough estimates of the VMT reductions that can reasonably be expected from the EPA and the local measures. The EPA strategy for the San Joaquin Valley Intrastate AQCR should yield reductions of between 4 and 13 percent; the local measures should provide an additional 3 to 11 percent reduction in VMT. Based on present data the remaining VMT reduction can only be achieved through more stringent means such as gas rationing in 1977.

TABLE 5.—SUMMARY OF IMPACT OF CONTROL STRATEGIES IN KERN COUNTY PORTION OF SAN JOAQUIN VALLEY REGION IN 1977

Sources and control measures	Emissions and reductions of reactive hydrocarbons, tons/day	Percent reductions per measure
Stationary source emissions in 1977 without proposed control strategy	11.3	
Expected reductions:		
1. Vapor recovery at gasoline stations	—5.8	37.2
2. Surface coating restrictions, drycleaning controls, and degreasing controls	—0.7	4.5
Stationary source emissions remaining	4.8	

TABLE 5.—SUMMARY OF IMPACT OF CONTROL STRATEGIES  
IN KERN COUNTY PORTION OF SAN JOAQUIN VALLEY  
REGION IN 1977—Continued

Sources and control measures	Emissions and reductions of reactive hydro- carbons, tons/day	Percent reduc- tions per measure
Mobile source emissions in 1977 without the proposed control strategy	21.4	
Expected reductions:		
1. Reductions from only EPA promulgated VMT control strategies assuming a 4 percent VMT reduction <sup>1</sup>	—.6	3.8
2. Catalyst retrofit, expansion of State nitrogen oxides program, and mandatory inspection and maintenance	—4.0	25.0
3. Motorcycle emission regulations	—.8	5.1
4. VMT reduction necessary from additional control strategies to be implemented in 1977	—3.7	23.8
Mobile emissions remaining	12.5	
Total emissions remaining	17.3	
Allowable emissions for attainment of standards for photochemical oxidants <sup>2</sup>	17.2	

<sup>1</sup> Using optimistic assumptions and estimations of both EPA and local VMT reduction measures, a total reduction of 24 percent, or 3.6 tons/day could occur.

<sup>2</sup> Based on linear rollback model.

*Discussion of final EPA control strategy for the San Joaquin Valley AQCR.* The control strategy for the San Joaquin Valley Region consists of various stationary and mobile controls designed to reach the photochemical oxidant standard by 1977. Many of the stationary source controls are the same as or slightly modified versions of the regulations proposed on July 16, 1973. The transportation control measures have been modified considerably. The measures reflect testimony received at the August 6 and 7, 1973, public hearings in Fresno, and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy to achieve the standard by 1977. EPA will carefully assess the reductions in VMT and improvements in air quality obtained from the various strategies and control regulations, and recommend additional strategies as needed between now and the 1977 legal attainment date.

The proposal to require a bus/carpool computer matching and promotion system by March 1974 has been modified to require that such a system be initially established at the Internal Revenue Center in Fresno. Upon evaluation, the system will be expanded throughout the four metropolitan areas of the Region. Finally, a "Mass Transit and Transit Priority Planning" regulation for the San Joaquin Valley Region has been added to the control plan.

A study sponsored by the California Department of Transportation is presently being conducted to determine the potential for public transit usage in the Fresno Area. Of particular interest to EPA will be the potential to establish preferential bus/carpool treatment on a north-south corridor between the Fresno CBD and northern residential suburbs. A six-lane freeway presently under construction in this corridor will be closely examined. It appears that similar studies will be necessary in other metropolitan areas of the Region in order to provide a rational basis for expanding mass transit service in certain areas of the San Joaquin Valley Region. As a result, EPA has promulgated final regulations calling for additional studies in the Stockton, Bakersfield, and

Modesto areas. From these future investigations and the Fresno study (in progress) transit strategy recommendations, including transit priority strategies, are to be submitted. These are to include implementation milestone timetables and obstacles, so that the Administrator can review all available information and determine the need for and the progress of implementation.

Surcharges on public and private parking have not been imposed in the urbanized portions of the San Joaquin Valley Region as they have in San Francisco, San Diego, and Los Angeles. However, the use of such a surcharge to raise revenue for mass transit is being considered by the Administrator, and written comment on this point is particularly invited.

*Locally implemented strategies.* The public hearing testimony, written comments, and the San Joaquin Valley Task Force indicated a wide variety of measures that could best be carried out on the local or state level. The EPA plan notes these measures as being applicable toward attainment of the oxidant standard and will encourage their implementation, although the reductions are not credited as part of the EPA plan. Furthermore, EPA will evaluate the progress and success in the implementation of these and similar measures and, if found necessary, promulgate additional measures to supplement them. Many of these measures will likely be contained in the anticipated revisions to the State Implementation Plan as a result of the Cal/Trans task force findings. In meetings between EPA and the transportation task force officials, it was noted that the cities of Fresno and Stockton were in the process of upgrading and expanding their mass transit bus systems. The City of Bakersfield has recently taken over operation of a mass transit bus system, and has experienced encouraging initial success in its effort to increase ridership. The California Department of Transportation vehicle miles traveled reduction plan to be submitted to EPA is expected to document the progress made by the present mass transit programs in the Valley, and allow EPA to monitor and evaluate the need for and progress of future public mass

transit program implementation, including the present and the estimated future financial commitment to mass transit.

Local agencies and private citizens gave written and verbal testimony on the desirability of improved bicycle networks. Due to the level terrain, many trips in the San Joaquin Valley could be taken by bicycle. It is anticipated that improvements of this type will be made in the next several years.

#### SAN DIEGO INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The San Diego Intrastate Region, also known as the San Diego Air Basin, is located in the southwest corner of the State and consists of nearly all of San Diego County. It is bounded on the east by the summit of the Peninsular Range, on the north by Orange County, and on the south and west by Mexico and the Pacific Ocean, respectively. The airshed has a land area of approximately 3,040 square miles, and, as of 1973, a population of some 1.5 million people. It is estimated that the motor vehicle population in 1972 was approximately 715,000. The Region's population is concentrated primarily in the City of San Diego and in the incorporated areas along the coast. The mountainous terrain and frequent inversions hold in pollutants, and the Southern California climate provides ample sunshine to aid in the formulation of photochemical oxidants. The automobile is presently the dominant mode of transportation, and accounts for the majority of the hydrocarbon and carbon monoxide emissions. Air pollution control in the Region is the local responsibility of the San Diego County Air Pollution Control District. Since the airshed is contained within one county, no additional regional coordinating council is required for stationary source controls. As in the rest of the State, mobile source emission controls are the responsibility of the California Air Resources Board.

An important factor in the design of any air pollution control strategy for the San Diego Region is the proximity

of the Tijuana, Mexico, metropolitan area. Tijuana is now the fifth largest city in Mexico with a population of over 500,000, and is located adjacent to the United States-Mexico Border, 12 miles south of downtown San Diego. Although prevailing meteorological conditions do not normally move Tijuana-caused air pollutants over the metropolitan San Diego area, there is substantial movement of motor vehicles from Tijuana to locations in the San Diego area on a daily basis. Furthermore, enforcement of several of the EPA-promulgated regulations will be more difficult due to the border problem. EPA will work closely with environmental authorities in the Republic of Mexico to help alleviate air pollution problems in this and other international urban areas.

The national ambient air quality standards for photochemical oxidants and carbon monoxide have been exceeded in the Region. In 1970, the maximum 1-hour oxidant reading recorded in the Region was 0.40 ppm at the Oceanside station. The use of this oxidant reading for air planning purposes was rejected on the basis that the reading was the result of an unusual traffic stoppage caused by highway construction, combined with unusually heavy volume that day. The next highest maximum 1-hour oxidant reading that occurred in the Region was 0.32 ppm at the Escondido Station, in 1972, and this reading was used for oxidant air planning purposes. (The maximum oxidant reading was statistically evaluated by the method described earlier in the Metropolitan Los Angeles preamble, and was found to be substantially correct.) A high 8-hour carbon monoxide reading of 18 ppm recorded in 1972 is being used for carbon monoxide air planning purposes. As in other areas of California, the predominant air pollution problem is photochemical oxidants. A review of air quality data for 1970-1972 shows that both oxidant and carbon monoxide standards were frequently exceeded. Both the frequency of violations and the maximum levels of oxidant experienced indicate the need for extensive mobile and stationary source control if the national ambient air quality standards are to be achieved. The oxidant problem is the main obstacle to attainment of the standards.

Emissions must be lowered to the following levels to meet the photochemical oxidant and the 8-hour carbon monoxide standards: the reactive hydrocarbon emissions must be lowered to 25 percent of 1972 emission levels in order to meet the oxidant standard, and the carbon monoxide emissions must be lowered to 50 percent of 1972 emission levels in order to meet the carbon monoxide standard, using the proportional roll-back model.

The majority of the carbon monoxide and reactive hydrocarbon emissions in the Region are attributable to motor vehicles. In addition to stringent controls for stationary sources and requirements for mechanized emissions controls on motor vehicles, VMT reductions will also have to be effected in order to meet the oxidant standard in 1977. It should also be pointed out that it is estimated by EPA that one of the proposed technical strategies, catalyst retrofit, cannot be implemented before 1977.

Table 6 shows the impact the proposed measures will have on total emissions in the San Diego Region.

TABLE 6.—SUMMARY OF IMPACT OF CONTROL STRATEGIES  
IN SAN DIEGO REGION IN 1977

Source and control measures	Emissions and reductions of reactive hydrocarbons, tons/day	Percent reductions per measure
Stationary source emissions in 1977 without proposed control strategy	20.6	
Expected reductions:		
1. Surface coating restrictions, dry cleaning, and degreasing controls	-15.8	28.2
Stationary emissions remaining	4.8	

TABLE 6.—SUMMARY OF IMPACT OF CONTROL STRATEGIES  
IN SAN DIEGO REGION IN 1977—Continued

Source and control measures	Emissions and reductions of reactive hydrocarbons, tons/day	Percent reductions per measure
Mobile source emissions in 1977 without proposed control strategy	86.4	
Expected reductions:		
1. Reductions from only EPA promulgated VMT control strategies assuming an 11 percent VMT reduction <sup>1</sup>	—6.4	11.4
2. Catalyst retrofit, and mandatory inspection and maintenance	—12.9	23.0
3. Motorcycle limitations	—1.9	3.4
4. VMT reductions necessary from additional control strategies to be implemented in 1977	—19.0	34.0
Mobile emissions remaining	46.2	
Total emissions remaining	51.0	
Allowable emissions for attainment of standard for photochemical oxidants <sup>2</sup>	51.0	

<sup>1</sup> Using optimistic assumptions and estimations of both EPA and local VMT reduction measures, a total reduction of 29 percent, or 16.9 tons/day could occur.

<sup>2</sup> Based on linear rollback model.

Based upon the available data, EPA has made rough estimates of the VMT reductions that can reasonably be expected from the EPA and local measures. The EPA strategy for the San Diego Intrastate AQCR should yield reductions of between 11 and 19 percent. The local measures not promulgated by EPA should provide an additional 7 to 10 percent reduction in VMT. It should be noted that EPA has promulgated many of the local measures and therefore the 11 to 19 percent VMT reduction reflects these task force measures. An additional VMT reduction of 7 to 10 percent would result from additional task-force recommended measures. Based on present data, the remaining VMT reduction can only be achieved through more stringent means such as gas rationing in 1977.

It is assumed by EPA, and is implicit in the control strategy calculations, that all Federal facilities will comply with State, local, and EPA air pollution emissions rules and regulations. Due to the extensive military activities in the San Diego Region and the significant harm to air quality that emissions from sources connected with these activities could produce, it is particularly important that military vehicles, operations, and facilities follow presidential Executive Order 11507 by conforming to State, local, and EPA rules and regulations. It is estimated that 40 percent of all aircraft operations in the San Diego area are by the military.

A recent decision to consolidate various Naval activities in the San Diego area is estimated by local officials to have the net effect of adding 50,000 persons to the San Diego area in the next 2 years. Several of the EPA regulations will initially be specific to military facilities, and EPA will work closely with the Department of Defense to develop additional strategies to lessen the impact of emissions from military activities.

*Discussion of final EPA control strategy for San Diego AQCR.* The control strategy for the San Diego Region consists of various stationary and mobile source controls designed to reach the photochemical oxidant standard by 1977. Many of the stationary source controls are the

same, or slightly modified. Versions [sic] of the regulations proposed in the July 16, 1973, FEDERAL REGISTER. The transportation control measures have been modified considerably. The measures reflect testimony received at the August 7, 1973, public hearing in San Diego and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy to achieve the standard by 1977.

The proposal to require a bus/carpool computer matching and promotion system by March 1974 has been modified to require that such a system be initially established at the U.S. Navy Electronics Laboratory and the U.S. Navy Underwater Systems Center in San Diego. Upon evaluation, the system will be expanded throughout the region. The Cal/Trans task force estimates a 4-percent reduction in VMT by 1977 if half the employees use the three-phase volunteer carpool system. Total cost of implementing this measure is \$175,000. Finally, approximately 10 miles of freeway will be given preferential bus/carpool treatment through ramp metering with bus carpool bypass lanes, and a major downtown San Diego street, Broadway, will be converted to exclusive bus usage as the first phase of a program to establish preferential treatment for mass transit.

*Locally implemented strategies.* The public hearing testimony, written comments, and the San Diego Task Force indicated a wide variety of measures that could best be carried out on the local or State level. The EPA plan notes these measures as being applicable toward attainment of the oxidant standard and will encourage their implementation, although the reductions are not credited as part of the EPA plan. Furthermore, EPA will evaluate the progress and success in the implementation of these and similar measures and if necessary, promulgate additional measures to supplement them. Many of these measures will likely be contained in the anticipated revisions to the State Implementation Plan as a result of the Cal/Trans task force findings. The task force estimates that the measures discussed below

will accomplish at least a 12.5 percent reduction in VMT by 1977.

Major improvements to the mass transit system in San Diego have occurred during the past year and are expected to be expanded as additional funds become available for these purposes. San Diego Transit initiated a 25¢, all-destinations, fare in August 1972 and bus ridership has doubled since that time. Three express bus routes to outlying areas of the metropolitan area were established in the past year and at least six more will be in operation by the end of 1977. This part of the system will require at least 125 new buses with an additional 175 feeder and local, off-peak buses to serve the express routes. Also, it is planned that 30 buses will be added to the North County system. Fringe parking lots will be established along these routes as well as at major regional shopping centers. Approximately 20 fringe parking lots are planned to serve the expanded mass transit system with a pilot project planned at Miramar for 1975. There are plans to place bicycle protection facilities at these fringe parking lots to allow nearby residents to bicycle to the bus stops. Ridership incentive programs are being planned through an extensive public information program. Dial-A-Bus and subscription bus service will also be carefully examined. The Cal/Trans task force estimates a 5-percent reduction in VMT by 1977 through implementation of these measures.

The city of San Diego has a \$125,000 regional bike way plan under consideration, consisting of 30 local bikepath proposals. Additionally, Cal/Trans is examining at least two bike routes to parallel portions of proposed freeway improvements.

Various traffic flow improvement programs are either underway or proposed for the next 4 years in the San Diego Region. These include a major synchronized traffic signal system for major arterials, easing of traffic bottlenecks, and additional ramp metering. City officials are examining the possibility of fringe parking facilities on the perimeter of the central business district with a sys-

tem of people-movers and automobile bans in the same area.

A final measure that will likely be the subject of further consideration and experimentation in the next few years will be the variation of the work week to four 10-hour days and other combinations to determine the effects of such variations on air quality and VMT. Governmental agencies will be early candidates for this program.

#### SAN FRANCISCO BAY AREA INTRASTATE AIR QUALITY CONTROL REGION CONTROL STRATEGY

The San Francisco Bay Area Intrastate Region is comprised of nine counties, namely: Alameda, Contra Costa, Marin, San Francisco, San Mateo, Santa Clara, Napa, Solano, and Sonoma. The region covers approximately 5,600 square miles and has within its bounds approximately 4.6 million people and 2.7 million motor vehicles. Air pollution control in the region falls under the jurisdiction of the Bay Area Air Pollution Control District created by the California Legislature in 1955. During 1971, the Region experienced numerous violations of both Federal and State air quality standards. Based upon the linear rollback model and a high year or base year maximum 1-hour oxidant reading of .36 ppm which occurred in 1971 at San Leandro, a 78-percent reduction in base year reactive hydrocarbon emissions is required to achieve the ambient air quality standards for photochemical oxidant. (The maximum oxidant reading used was statistically evaluated by the method described earlier and was found to be substantially correct.)

Although mobile sources presently account for the majority of the emissions, their control alone will not be sufficient to allow for attainment of national ambient air quality standards. Table 7 shows the impact the proposed measures will have on the total emissions in the Region.

TABLE 7.—SUMMARY OF IMPACT OF CONTROL STRATEGIES IN SAN FRANCISCO BAY REGION IN 1977

Source of pollutant and control measures	Emissions and reductions tons/day of reactive hydrocarbons	Percent reduction per measure
Stationary source emissions in 1977 without control strategy	225	
Expected reductions:		
1. Gasoline marketing vapor recovery	—138	45.8
2. Surface coating, dry cleaning, and degreasing controls	—37	12.3
Stationary source emissions remaining	50	
Mobile source emissions in 1977 without proposed control strategy	201	
Expected reductions:		
1. Reductions from only EPA-promulgated VMT control strategies assuming an 11 percent VMT reduction. <sup>1</sup>	—14	4.7
2. Light-duty motor vehicle inspection and maintenance and catalytic converter retrofit	—33	11.0
3. Motorcycle emissions regulation	—6	2.0

<sup>1</sup> Using optimistic assumption and estimations of both EPA and local VMT reduction measures, a total reduction of 32 percent VMT, or 41 tons/day could occur.

TABLE 7.—SUMMARY OF IMPACT OF CONTROL STRATEGIES  
IN SAN FRANCISCO BAY REGION IN 1977—Continued

Source of pollutant and control measures	Emissions and reductions tons/day of reactive hydrocarbons	Percent reduction per measure
4. VMT reductions necessary from additional control strategies to be implemented in 1977	—73	24.2
Mobile emissions remaining	75	
Total emissions remaining	125	
Allowable emissions to attain standards. <sup>a</sup>	125	

<sup>a</sup> Based on linear rollback model.

A VMT reduction of 97 percent is necessary if the national standard for photochemical oxidants is to be attained by 1977.

Based upon available data, EPA has made rough estimates of the VMT reductions that can reasonably be expected from the EPA and the local measures. The EPA strategy for the San Francisco Bay Area Intrastate AQCR should yield reductions of between 11 and 28 percent; the local measures should provide an additional 4 percent improvement in air quality. Based on present data, the remainder of the VMT reduction needed can only be achieved through more stringent measures, such as gas rationing, imposed in 1977.

It is hoped that in the process of developing a regional transportation plan, the Metropolitan Transportation Commission will be able to determine the effect of its plan upon air quality generally, and specifically upon the miles traveled by automobiles. Many of the measures in the

EPA-promulgated control plan consist of MTC adopted strategies.

*Discussion of final EPA control strategy for San Francisco Bay Area AQCR.* The control strategy for the San Francisco Bay Area Region consists of various stationary and mobile source controls designed to reach the photochemical oxidant standard by 1977. Many of the stationary source controls are the same, or slightly modified, versions of the regulations proposed in the July 16, 1973, FEDERAL REGISTER. The transportation control measures have been modified considerably. The measures reflect testimony received at the August 8, 1973 public hearing in San Francisco and written comments received on the plan. Additionally, various State and/or locally implemented controls are noted as part of the total strategy to achieve standard by 1977. For example, full implementation of the Bay Area Rapid Transit (BART) system during the next year should reduce VMT by 2 percent in the Region. EPA will carefully assess the reductions in VMT and improvements in air quality obtained from the various strategies and control regulations, and recommended additional strategies as needed between now and the 1977 legal attainment date.

The proposal to require a bus/carpool computer matching and promotion system by March of 1974 has been modified to require an in-depth evaluation of the present carpool program being implemented by governmental agencies in the San Francisco CBD and to determine the most feasible plan for full scale implementation. Special emphasis is given to pilot bus/carpool programs at Alameda Naval Air Station, Moffett Field Naval Air Station, U.S. Army Presidio, and Treasure Island Naval Station.

*Locally implemented strategies.* The public hearing testimony, written comments, and the meetings with the State and local transportation officials (San Francisco "Task Force") indicated a wide variety of measures that could be best carried out on the local or State level. In the San Francisco Bay Area, such measures as those being investigated and implemented through the Metro-

opolitan Transportation Commission (MTC) are of particular interest to the Environmental Protection Agency, particularly with regard to their effect on air quality. At the public hearings on the EPA transportation control plan proposal, testimony given by an official representing the MTC shows that 10- to 15-percent VMT reduction will occur as a result of the MTC plan, and that an additional 5-percent VMT reduction could occur with an enlarged MTC program. In regulations promulgated by this rulemaking, the EPA is requiring the State to submit an analysis of the status of each element of the MTC Regional Transportation Plan and to substantiate its effect on air quality. It is the Administrator's understanding that such an analysis is currently underway by the California Department of Transportation (Cal/Trans) and will be submitted to EPA.

Locally implemented strategies that the MTC and State are investigating include in part: Bridge toll fare increases, exclusive bus and carpool lanes, ramp metering, increased bicycle facilities, improved local transit, anticipated Bay Area Rapid Transit expansion, increased ferry service to the North Bay, fringe parking facilities, and reduced transit fares.

*Possible further action.* The Clean Air Act requires that all "reasonably available" measures to reduce emissions be applied between now and 1977. The plan promulgated today attempts to fulfill this requirement.

The Administrator is conscious, however, that his knowledge of this field is necessarily imperfect and incomplete. Measures may not work as well as anticipated, or they may work better. Further study may show that more controls are needed or feasible or that different methods of attaining the same end would be preferable. In cases where State or local actions are considered in calculating emission reductions, they may not be implemented as presently anticipated.

The plan approved today constitutes final rulemaking. Its measures are legally enforceable, and EPA will enforce them unless and until alternatives are suggested and found to be preferable. However, the lack of knowledge in this field makes it highly conceivable that such

alternatives will be suggested. EPA welcomes such suggestions, and will in addition monitor the effect of this plan continuously to see whether revisions, or the addition of more stringent measures, is in order.

(Secs. 110(c), 301(a), Pub. L. 89-272, 79 Stat. 992 (42 U.S.C. 1857c-5(c)).)

Dated: October 30, 1973.

JOHN QUARLES,  
Acting Administrator.

Part 52 of Chapter I, Title 40, of the Code of Federal Regulations is amended as follows:

#### Subpart F—California

1. In § 52.222, paragraphs (b) and (c) are added to read:

##### § 52.222 Extensions.

\* \* \* \*

(b) The Administrator hereby extends the attainment dates for the national standards for carbon monoxide and photochemical oxidants (hydrocarbons) as follows: San Francisco Bay Intrastate, two years (to May 31, 1977); Metropolitan Los Angeles Intrastate, two years (to May 31, 1977); San Diego Intrastate, two years (to May 31, 1977); Sacramento Valley Intrastate, two years (to May 31, 1977); San Joaquin Valley Intrastate, two years (to May 31, 1977); Southeast Desert Intrastate, two years (to May 31, 1977).

(c) The Administrator hereby extends the attainment dates for the national standards for nitrogen dioxide as follows: Metropolitan Los Angeles Intrastate, two years (to May 31, 1977).

##### § 52.237 [Reserved]

2. Section 52.237 is revoked and reserved.

## § 52.238 [Amended]

3. In § 52.238, the attainment date table is amended by revoking footnotes f and g and revising the first column (Air Quality Control Region) and the last three columns [Nitrogen Dioxides, Carbon Monoxide, and Photochemical oxidants (Hydrocarbons)] to read as follows:

Air Quality Control Region	Nitrogen dioxide	Carbon monoxide	Photo-chemical oxidants (Hydrocarbons)
North Coast Intrastate	(e)	(e)	(e)
San Francisco Bay Intrastate	(e)	May 31, 1977	May 31, 1977
North Central Coast Intrastate	(e)	(e)	(a)
South Central Coast Intrastate	(e)	(e)	(a)
Metropolitan Los Angeles Intrastate	May 31, 1977	May 31, 1977	May 31, 1977
San Diego Intrastate	(e)	May 31, 1977	May 31, 1977
Northeast Plateau Intrastate	(e)	(e)	(e)
Sacramento Valley Intrastate	(e)	May 31, 1977	May 31, 1977
San Joaquin Valley Intrastate	(e)	May 31, 1977	May 31, 1977
Great Basin Valley Intrastate	(e)	(e)	(e)
Southeast Desert Intrastate	(e)	May 31, 1977	May 31, 1977

## § 52.239 [Reserved]

4. Section 52.239 is revoked and reserved.

5. Sections 52.241 through 52.266 are added to read as follows:

## § 52.241 Gasoline limitations.

## (a) Definitions:

(1) "Distributor" means any person or entity that transports, stores, or causes the transportation or storage of gasoline between any refinery and any retail outlet.

(2) "Retail outlet" means any establishment at which gasoline is sold or offered for sale to the public, or introduced into any vehicle.

(b) This regulation is applicable in the Metropolitan Los Angeles, San Francisco Bay Area, Sacramento Valley, San Joaquin Valley, and San Diego Intrastate Air Quality Control Regions (the "Regions") to all distributors of gasoline to any retail outlet in the Regions, and

to the owners and operators of all retail outlets in the Regions.

(c) If the Administrator determines, on the basis of air quality monitoring in the Regions, that the national ambient air quality standards for carbon monoxide and photochemical oxidants will not be attained in a Region by May 31, 1977, the Administrator shall implement a program, to be effective no later than May 31, 1977, limiting the total gallonage of gasoline delivered to retail outlets in that Region to that amount which, when combusted, will not result in the ambient air quality standards being exceeded.

(d) All distributors to which this section applies shall provide the Administrator with a detailed annual accounting of the amount of gasoline delivered to each retail outlet in the Regions for calendar year 1976 and for each calendar year during which the gasoline limitation program is in effect. The owner or operator of each retail outlet to which this section applies shall provide the Administrator with a detailed accounting of gasoline received from each distributor, the total amount of gasoline sold during the year, and the amount of gasoline on hand at the beginning and end of the year, and each year during which the gasoline limitation program is in effect. All accountings required by this section shall be provided no later than 90 days after the end of the applicable year. The Administrator may require any other report that he may deem necessary for the implementation of this section.

## § 52.242 Inspection and maintenance program.

## (a) Definitions:

(1) "Inspection and maintenance program" means a program to reduce emissions from in-use vehicles through identifying vehicles which need emission control-related maintenance and requiring that maintenance be performed.

(2) "Light-duty vehicle" means any gasoline-powered motor vehicle rated at 6,000 pounds GVW or less.

(3) All other terms used in this section that are defined in Appendix N to Part 51 of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the Metropolitan Los Angeles, San Diego, Sacramento Valley, San Joaquin Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions (hereinafter referred to as the Regions).

(c) The State of California shall establish an inspection and maintenance program applicable to all light-duty vehicles registered in the Regions that operate on streets or highways over which it has ownership or control. No later than June 1, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The State may exempt any class or category of vehicles which it finds are rarely used on public streets and highways (such as classic or antique vehicles). The regulations shall include:

(1) Provisions for inspection of all light-duty motor vehicles at periodic intervals no more than one year apart by means of a loaded test.

(2) Provisions for inspection failure criteria consistent with the emission reductions claimed in the plan for the strategy. These emission reductions are 15 percent for hydrocarbons and 12 percent for carbon monoxide. These criteria are estimated to include failure of 50 percent of the vehicles in the first inspection cycle.

(3) Provisions to ensure that failed vehicles receive within two weeks, the maintenance necessary to achieve compliance with the inspection standards. This shall include sanctions against non-complying individual owners and repair facilities, retest of failed vehicles following maintenance, a certification program to ensure that repair facilities performing the required maintenance have the necessary equipment, parts, and knowledgeable operators to perform the tasks satisfactorily, and such other measures as may be necessary or appropriate.

(4) A program of enforcement to ensure that, following inspection or maintenance, vehicles are not intentionally readjusted or modified in such a way as would cause

them no longer to comply with the inspection standards. This might include spot checks of idle adjustments and/or a suitable type of physical tagging. This program shall include appropriate penalties for violation.

(5) Provisions for beginning the first inspection cycle on October 1, 1975, and completing it by September 30, 1976.

(6) Designation of an agency or agencies responsible for conducting, overseeing, and enforcing the inspection and maintenance program.

(d) After September 30, 1976, the State shall not register or allow to operate on its streets or highways any light-duty vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section. This shall not apply to the initial registration of a new motor vehicle.

(e) After September 30, 1976, no owner of a light-duty vehicle shall operate or allow the operation of such vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section. This shall not apply to the initial registration of a new vehicle.

(f) The State of California shall submit no later than February 1, 1974, a detailed compliance schedule showing the steps it will take to establish and enforce an inspection and maintenance program pursuant to paragraph (c) of this section, including the text of needed statutory proposals and needed regulations that it will propose for adoption. The compliance schedule shall also include:

(1) The date by which the State will recommend any needed legislation to the State legislature.

(2) The date by which necessary equipment will be ordered.

(3) A signed statement from the Governor and State Treasurer identifying the sources and amount of funds for the program. If funds cannot legally be obligated under existing statutory authority, the text of needed legislation shall be submitted.

**§ 52.243 Motorcycle limitation.**

(a) Definitions:

(1) "Motorcycle" means any self-propelled, two- or three-wheeled motor vehicle capable of carrying one or more persons.

(b) This section is applicable in the San Diego, Los Angeles, San Francisco Bay Area, San Joaquin Valley, and Sacramento Valley Air Quality Control Regions (the "Region").

(c) As of January 1, 1976, the State of California shall prohibit the operation of motorcycles in each Region between the hours of 6 a.m. and 8 p.m. during the months of May, June, July, August, and September.

(d) The restrictions set forth in paragraph (c) of this section shall be of no force and effect during the period from January 1, 1976, to December 31, 1978, if the Administrator establishes legally valid and binding emission standards applicable to all new motorcycles meeting the light-duty vehicle definition of the Clean Air Act, sold in 1976 and later model years, and such standards require emission levels representing at least a 50 percent reduction in present emission levels of hydrocarbons emitted by 2-stroke motorcycles and a significant reduction in emissions of carbon monoxide from present levels emitted by both 2- and 4-stroke motorcycles.

(e) The restrictions set forth in paragraph (c) of this section shall be of no force and effect on and after January 1, 1979, if the Administrator establishes legally valid and binding emission standards for new motorcycles sold in the 1979 and later model years, and such standards [require] motorcycles manufactured during the 1979 and later model years to achieve at least the same degree of emission control of hydrocarbons and carbon monoxide as is required for 1976 and later model year light-duty vehicles.

(f) No later than July 1, 1975, and July 1, 1978, respectively (unless the applicable exemptions under paragraphs (d) or (e) of this section have become available), the State shall submit a detailed compliance sched-

ule showing the steps it will take to implement and enforce these requirements, including:

(1) The text of needed statutory proposals and needed regulations which it will propose for adoption.

(2) A date by which the State will adopt procedures (or submit evidence that they are in existence) necessary to restrict the operation of motorcycles as required above. Such date shall be no later than December 1, 1975, and December 1, 1978, respectively.

**§ 52.244 Oxidizing catalyst retrofit.**

(a) Definitions:

(1) "Oxidizing catalyst" means a device installed in the exhaust system of a vehicle that utilizes a catalyst and, if necessary, an air pump to reduce emissions of hydrocarbons and carbon monoxide from that vehicle.

(2) "Light-duty vehicle" means any gasoline-powered motor vehicle rated at 6,000 pounds GVW or less.

(3) All other terms used in this section that are defined in Part 51, Appendix N, of this chapter, are used herein with the meanings so defined.

(b) This section is applicable in the San Diego, San Francisco Bay Area, San Joaquin Valley, Sacramento Valley, and Metropolitan Los Angeles Intrastate Air Quality Control Regions.

(c) The State of California shall establish a retrofit program to ensure that on or before May 31, 1977, all gasoline-powered, light-duty motor vehicles of model years 1966 through 1974, which are subject under currently existing legal requirements to registration in the area defined in paragraph (b) of this section, and which are capable of operating on unleaded gasoline having a research octane number (RON) of 91 or lower, are equipped with an appropriate oxidizing catalyst retrofit device. No later than September 1, 1974, the State shall submit legally adopted regulations to EPA establishing such a program. The regulations shall include:

(1) Designation of an agency responsible for evaluating and approving such devices for use in motor vehicles subject to this section.

(2) Designation of an agency responsible for ensuring that the provisions of paragraph (c) (3) of this section are enforced.

(3) A provision that, starting no later than December 1, 1975, the State of California shall commence retrofitting oxidizing catalysts to those light-duty motor vehicles able to operate properly and safely on unleaded 91 RON gasoline. The installation shall be completed by May 31, 1977.

(4) A method and proposed procedures for ensuring that those installing the retrofits have the training and ability to perform the needed tasks satisfactorily and that they have an adequate supply of retrofit components.

(d) After May 31, 1977, the State shall not register or allow to operate on public streets or highways any light-duty, gasoline-powered vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(e) After May 31, 1977, no owner of a vehicle subject to this section shall operate or allow the operation of any such vehicle that does not comply with the applicable standards and procedures adopted pursuant to paragraph (c) of this section.

(f) The State of California shall submit, no later than April 1, 1974, a detailed compliance schedule showing the steps it will take to establish and enforce a retrofit program pursuant to paragraph (c) of this section, and the text of needed statutory proposals and needed regulations that it will propose for adoption. The compliance schedule shall include a date by which the State shall evaluate and approve devices for use in this program. Such date shall be no later than January 1, 1975.

#### § 52.245 Control of oxides of nitrogen, hydrocarbon, and carbon monoxide emissions from in-use vehicles.

(a) The State of California retrofit program, authorized under section 39176 of the State of California Health

and Safety Code and established by the California Air Resources Board for the purpose of controlling oxides of nitrogen, hydrocarbon, and carbon monoxide emissions from model year 1955 through 1965 light-duty motor vehicles, shall be extended to the San Joaquin Valley and Sacramento Valley Intrastate Air Quality Control Regions (the "Regions").

(b) Beginning March 31, 1974, the State of California shall commence the operation of this program in the Regions.

#### § 52.246 Control of dry cleaning solvent vapor losses.

(a) For the purpose of this section, "dry cleaning operation" means that process by which an organic solvent is used in the commercial cleaning of garments and other fabric materials.

(b) This section is applicable in the Metropolitan Los Angeles, San Diego, Sacramento Valley, San Joaquin Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions.

(c) Any dry cleaning establishment that uses solvents containing 4 percent or more by volume of any reactive organic material listed under paragraphs (k) (1), (2), and (3) of § 52.254 except perchloroethylene or any saturated halogenated hydrocarbon shall reduce the emissions of the discharged organics by 90 percent by use of activated carbon adsorption or other appropriate means; not later than January 1, 1975.

(d) If incineration is used as a control technique, 90 percent or more of the carbon in the organic compounds being incinerated must be oxidized to carbon dioxide.

#### § 52.247 Definitions for parking management regulations.

(a) For purposes of §§ 52.248, 52.249, 52.250, and 52.251:

(1) "Parking facility" (also called "facility") means any facility, building, structure, lot, or portion thereof used primarily for temporary storage of motor vehicles.

(2) "Parking space" means any area whatsoever customarily used for the temporary storage of a motor vehicle that is not being held for the sole purpose of original sale, resale, or repair.

(3) "Employer" means any person or entity that employs 50 or more persons. "Employee parking space" means any parking space reserved or provided by any employer for the primary use of his employees.

(4) "Residential parking space" means any parking space used primarily for the parking of vehicles of persons residing within less than half a mile of the space.

(5) "Commercial parking space" means any parking space in which the parking of a single motor vehicle is permitted for a fee. It includes on-street parking governed by parking meters, and excludes employee and residential parking spaces.

(6) "Free parking space" means any parking space in which the parking of a single motor vehicle without a fee is permitted or encouraged by the person having control of such space, whether for the purpose of encouraging patronage of commercial establishment(s) or otherwise. It includes free on-street parking and free parking on vacant lots, and excludes employee and residential parking spaces. All parking spaces are either commercial, employee, residential, or free parking spaces.

#### § 52.248 Surcharge on commercial parking spaces.

(a) This section is applicable in the Los Angeles, San Diego, and San Francisco Bay Area Intrastate Air Quality Control Regions (the "Regions").

(b) A surcharge of the amount designated in paragraph (c) of this section shall be applied to all contracts or other agreements whereby a vehicle is parked for a fee in any commercial parking space located in the areas described in paragraph (a) of this section. Such surcharge shall be collected by the county or municipality having regulatory jurisdiction over the particular commercial parking space involved or by its designated agent. The surcharge fees minus collection expenses, if any, in event no less than 50 percent of the gross proceeds, shall be utilized for EPA approved or designated mass transit

improvements within the Region in which the surcharge is collected. The State of California, or its designated agent, if it wishes, may collect such surcharge instead of the relevant local governmental entity. The surcharge shall be calculated on an hourly basis and applied to all parking between the hours of 7:00 a.m. and 7:00 p.m. on all days other than Saturdays, Sundays, and legal holidays. However, the maximum daily surcharge shall not exceed ten times the hourly surcharge rate, and if a vehicle is parked for more than one day, only the surcharge for the first day shall be collected. Exemptions from this surcharge may be given to handicapped persons and disabled veterans.

(c) The surcharge shall be implemented on the following schedule:

Effective date	Hourly rate	Area of applicability
July 1, 1974	\$0.10	All cities with population greater than 100,000 in the Regions.
July 1, 1975	.20	All cities with population greater than 50,000 in the Regions.
July 1, 1976	.25	Regions as a whole.

(d) Each person or entity owning or operating any commercial parking space subject to this section, and each local government entity on which obligations are imposed by this section shall, at least 3 months before the effective date of any surcharge provided by this section, submit to the Administrator a detailed compliance schedule showing the steps it will take to collect the said surcharge. The compliance schedule shall specify steps to be taken to keep a permanent record of the number of vehicle hours of parking for which the facility is used each day that can be compared with the revenues collected, and, in the case of governmental entities respon-

sible for collecting such fees, shall also detail a system of spot checks or similar enforcement measures designed to assure that owners and operators of commercial parking section, the exact manner in which the revenues so collected will be used to promote mass transit, and a documentation of the surcharge collection expenses incurred.

(e) Parking spaces or facilities that are used exclusively to service mass transit (for example, park-and-ride facilities) shall be exempt from the provisions of this section, but a request for exemption must be made to the Administrator and approved by him.

#### § 52.249 Surcharge on free parking spaces.

(a) This section is applicable in the Metropolitan Los Angeles, San Diego, and San Francisco Bay Area Intra-state Air Quality Control Regions (the "Regions").

(b) Any owner or operator of more than five free parking spaces shall be subject to a regulatory fee in the amount set forth in paragraph (c) of this section. Such surcharge shall be collected by the county or municipality having regulatory jurisdiction over the particular free parking space involved, or its designated agent, and the surcharge fees minus collection expenses, but in any event no less than 50 percent of the gross proceeds shall be utilized for EPA approved or designated mass transit improvements within the Region in which the surcharge was collected. The State of California, or its designated agent, if it wishes, may collect the surcharge instead of the relevant local government. The surcharge shall be assessed annually each July 1 on the number of free parking spaces in existence at that date. Spaces temporarily removed for the purpose of avoiding the surcharge shall also be assessed.

However, to the extent that any person subject to a surcharge under this section elects to make payments to promote mass transit or carpooling in a manner satisfactory both to the Administrator and the collecting agency, the amount of the surcharge shall be abated. For exam-

ple, a shopping center might institute a Dial-a-Ride service.

(c) The surcharge shall be implemented on the following schedule:

Effective date	Yearly amount per parking space	Area of applicability
July 1, 1974	\$180	All cities with population greater than 100,000 in the Regions.
July 1, 1975	360	All cities with population greater than 50,000 in the Regions.
July 1, 1976	450	Regions as a whole.

The amount of the fee was determined by calculating what the annual proceeds of the surcharge imposed by § 52.248 of this subpart on a commercial parking space would be assuming a 250-day year and 60 percent average occupancy during the days on which the fee was collected.

(d) Each person or entity owning or operating any free parking space subject to this section shall, at least 5 months before the effective date of any surcharge provided by this section, submit to the Administrator an exact accounting of the number and location of such spaces under its ownership or control. Each local government entity on which obligations are imposed by this section shall, at least 3 months before the effective date of any surcharge provided by this section, submit to the Administrator a detailed compliance schedule showing the steps it will take to assess the accuracy of and correct any omissions in the accounts submitted by owners or operators subject to this section, the steps to collect the surcharge provided by this section, the exact manner in which the revenues so collected will be used to promote

mass transit, and a documentation of the surcharge collection expenses incurred.

(e) Parking spaces or facilities that are used exclusively for serving mass transit (for example, park-and-ride facilities) shall be exempt from the provisions of this section, but a request for such exemption must be made to the Administrator and approved by him.

**§ 52.250 Employers provision for mass transit priority incentives.**

(a) Definitions:

(1) "Carpool" means a vehicle containing two or more persons.

(2) "Commercial rate" means the average daily rate charged by the three operators of parking facilities containing 100 or more commercial parking spaces that are closest in location to any employee parking space affected by this section.

(b) This section is applicable in the Metropolitan Los Angeles, San Francisco Bay Area, and San Diego Intra-state Air Quality Control Regions: in the Stanislaus, Fresno, San Joaquin, and Kern County portions of the San Joaquin Valley Intra-state Air Quality Control Region; and in the Sacramento, Yolo, El Dorado, and Placer County portions of the Sacramento Valley Air Quality Control Region (the "Regions").

(c) Each employer in the areas listed below maintaining more than the number of employee parking spaces specified, shall, commencing on the date listed, charge no less than the rate shown in the following table for the use of any such employee parking space by employees driving to work and not traveling in carpools:

**EMPLOYER PARKING RATES**

Employers (classified by number of employee parking spaces maintained)	Effective date	Total rate equals com- mercial rate (CR) plus—	Area of applicability
700	July 1, 1974	\$1.00	All areas.
70	July 1, 1974	1.00	All cities over 100,000 in the Los Angeles, San Diego, and San Francisco Regions.
700	July 1, 1975	2.00	All areas.
70	July 1, 1975	2.00	All cities over 50,000 in the Los Angeles, San Diego, and San Francisco Regions.
70	July 1, 1975	1.00	All areas other than cities over 50,000.
700	July 1, 1976	2.50	All areas.
70	July 1, 1976	2.50	All areas in the Los Angeles, San Diego, and San Francisco Regions.
70	July 1, 1976	2.00	All areas in the Sacramento and San Joaquin Regions.
70	Mar. 31, 1977	2.50	All areas.

No employer may charge employees traveling to work in two-person carpools more than half the parking rate specified for non-carpool vehicles by this table. Carpools of three or more shall be allowed to park free of charge, and shall be allotted the spaces closest to the employment facility.

(d) Each employer subject to an obligation under paragraph (c) of this section, shall on the first date such an obligation becomes effective, also

(1) Institute a program of reimbursing employees for their expenses in utilizing mass transit facilities. However, such reimbursements need not exceed \$200 per year per employee. Reimbursements shall be made in a form usable only as payment for the cost of such mass transit to be used by the employee only for commuting travel.

(2) Take all reasonable steps to encourage employees to commute to work by subscription or charter bus and similar privately owned mass transit facilities.

(3) Any funds collected under this section and remaining after overhead and payments to employees under paragraph (d) (1) and (2) of this section shall be disbursed to a State-designated, EPA-approved mass transit planning agency.

(e) Each employer subject to obligations under this section shall, at least 3 months prior to the effective date of any such obligation, submit to the Administrator a detailed compliance schedule setting forth the steps it will take to meet those requirements. The compliance schedule shall include a procedure for checking vehicles to determine whether or not they are carpools; for collecting the fees required to be collected hereunder; for disbursing any sums to individual employees in compensation for their use of mass transit; and for ensuring that such disbursements are used only for that purpose. It shall specify the steps that will be taken to determine the commercial parking rate for each affected employment facility and to encourage use of such private transit facilities as charter buses.

(f) As of the date that any obligations under this section become effective as to any employer, any zoning

or land-use requirement specifying that an employer shall provide a given number of employee parking spaces for any given number of employees shall, as applied to such employer, be of no force or effect, except as specifically approved in writing by the Administrator.

#### § 52.251 Management of parking supply.

(a) Definitions: All terms used in this section but not specifically defined below shall have the meaning given them in Part 51 of this chapter and this Part 52.

(1) "Vehicle trip" means a single movement by a motor vehicle that originates or terminates at a parking facility.

(2) "Construction" means fabrication, erection, or installation of a parking facility, or any conversion of land or a building structure or portion thereof for use as a facility.

(3) "Modification" means any change, including enlargement, in the design, construction, capacity, or method of operation of a parking facility that increases or may increase the motor vehicle capacity of or the motor vehicle activity associated with such parking facility.

(4) "Commerce" means to undertake a continuous program of on-site construction or modification.

(b) This regulation is applicable in the Metropolitan Los Angeles, San Diego, and San Francisco Bay Area Intrastate Air Quality Control Regions, in the Stanislaus, Fresno, San Joaquin, and Kern County portions of the San Joaquin Valley Intrastate Air Quality Control Region, and in the Sacramento, Yolo, El Dorado, and Placer County portions of the Sacramento Valley Intrastate Air Quality Control Region.

(c) The requirements of this section are applicable to the following parking facilities in the areas specified in paragraph (b) of this section, the construction or modification of which commenced after August 15, 1973.

(1) Any new parking facility with parking capacity for 50 or more motor vehicles.

(2) Any parking facility that will be modified to increase parking capacity by 50 or more motor vehicles.

(3) Any parking facility constructed or modified in increments which individually are not subject to review

under this section, but which, when all such increments occurring since August 14, 1973, are added together, as a total would subject the facility to review under this section.

(d) No person shall commence construction or modification of any facility subject to this section without first obtaining written approval from the Administrator or any agency designated by him; provided that this paragraph shall not apply to any proposed parking facility for which a general construction contract was finally executed by all appropriate parties on or before August 15, 1973.

(e) No approval to construct or modify a facility shall be granted unless the applicant shows to the satisfaction of the Administrator or agency approved by the Administrator that:

(1) The design or operation of the facility will not cause a violation of the control strategy which is part of the applicable implementation plan, and will be consistent with the plan's VMT reduction goals, and

(2) The emissions resulting from the design or operation of the facility will not prevent or interfere with the attainment or maintenance of any national ambient air quality standard at any time within 10 years from the date of application. A permit will be granted in every case where the applicant makes a showing satisfactory to the Administrator that the spaces to be built will be used exclusively for serving mass transit (for example, as part of a park-and-ride system.)

(f) All applications for approval under this section shall include the following information:

- (1) Name and address of the applicant.
- (2) Location and description of the parking facility.
- (3) A proposed construction schedule.
- (4) The normal hours of operation of the facility and the enterprises and activities that it serves.
- (5) The total motor vehicle capacity before and after the construction or modification of the facility.

(g) All applications under this section for new parking facilities with parking capacity for 250 or more vehicles, or for any modification which, either individually or together with other modifications since August 15, 1973, will increase capacity by that amount, shall, in addition to that information required by paragraph (f) of this section, include the following information unless the applicant has received a waiver from the provisions of this paragraph from the Administrator or agency approved by him:

(1) The number of people using or engaging in any enterprises or activities that the facility will serve on a daily basis and a peak hour basis.

(2) A projection of the geographic areas in the community from which people and motor vehicles will be drawn to the facility. Such projection shall include data concerning the availability of mass transit from such areas.

(3) An estimate of the average and peak hour vehicle trip generation rates, before and after construction or modification of the facility.

(4) An estimate of the effect of the facility on traffic pattern and flow.

(5) An estimate of the effect of the facility on total VMT for the air quality control region.

(6) An analysis of the effect of the facility on site and regional air quality, including a showing that the facility will be compatible with the applicable implementation plan, and that the facility will not cause any national air quality standards to be exceeded within 10 years from date of application. The Administrator may prescribe a standardized screening technique to be utilized in analyzing the effect of the facility on ambient air quality.

(7) Additional information, plans, specifications, or documents required by the Administrator.

(h) Each application shall be signed by the owner or operator of the facility, whose signature shall constitute an agreement that the facility shall be operated in ac-

cordance with applicable rules, regulations, permit conditions, and the design submitted in the application.

(i) Within 30 days after receipts of an application, the Administrator or agency approved by him shall notify the public, by prominent advertisement in the Region affected, of the receipt of the application and the proposed action on it (whether approval, conditional approval, or denial), and shall invite public comment.

(1) The application, all submitted information, and the terms of the proposed action shall be made available to the public in a readily accessible place within the affected air quality region.

(2) Public comments submitted within 30 days of the date such information is made available shall be considered in making the final decision on the application.

(3) The Administrator or agency approved by him shall take final action (approval, conditional approval, or denial) on an application within 30 days after close of the public comment period.

(j) As an alternative to satisfying the requirements of paragraphs (d) through (i) of this section, any local jurisdiction or authority may submit to the Administrator a comprehensive parking management plan covering, at a minimum, the next 5 years. The plan should be submitted no later than March 31, 1974. The Administrator shall approve such plan if he finds that:

(1) The agency submitting the plan has full and adequate legal authority to enforce compliance with its requirements.

(2) The area over which the agency exercises the authority described in paragraph (j)(1) of this section is a logical unit for air pollution control planning purposes.

(3) The plan sets forth a complete description of where additional construction of parking facilities will be allowed under the plan, and where parking spaces will be eliminated, either by the operation of the measures set forth in §§ 52.248 through 52.250, or by further measures already adopted or to be adopted. The plan must state in detail the reasons for expecting any anticipated reduction in parking spaces, and must provide

that no parking facility may legally be constructed in the area subject to the plan unless such construction is specifically authorized by the plan.

(4) The plan demonstrates that if its terms are carried out, air quality will improve at least as much as if all new parking facilities were subject to the requirements of paragraphs (d) through (i) of this section. If any increases in VMT would result under the proposed plan over and above the VMT figure that would result if the review system outlined in paragraphs (d) through (i) of this section were followed, the plan shall show by clear and convincing evidence any resulting impact on air quality to be insubstantial.

(5) The plan has been adopted after a public hearing held in conformity with the requirements of § 51.4 of this chapter.

(k) In any area covered by a parking management plan approved under paragraph (j) of this section, no action to expand the number of spaces at parking facilities may be taken that is not explicitly provided for in the plan without a permit issued in accordance with the requirements of paragraphs (d) through (i) of this section.

#### § 52.252 Control of degreasing operations.

(a) "Degreasing" means any operation using an organic solvent as a surface cleaning agent prior to fabricating, surface coating, electroplating, or any other process.

(b) This section is applicable in the Metropolitan Los Angeles, San Diego, Sacramento Valley, San Joaquin Valley, and San Francisco Bay Area Intrastate Regions.

(c) Any organic emissions discharged from degreasing operations must either be reduced by at least 85 percent, or the degreasing solvent must be classified as non-photochemically reactive as defined by paragraph (k) of § 52.254 not later than January 1, 1975. This regulation shall not be construed as lessening any emission control requirement specified under EPA approved regulations or § 52.254. Degreasing operations using perchloroethyl-

ene or saturated halogenated hydrocarbons shall be exempt from the requirements of this section.

**§ 52.253 Metal surface coating thinner and reducer.**

(a) All terms defined in § 52.254 are used herein with the meanings so defined.

(b) This section is applicable in the Metropolitan Los Angeles, San Diego, San Joaquin Valley, Sacramento Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions (the "Regions").

(c) The composition of the organics in all metal surface coating thinners and reducers that are manufactured after January 1, 1975, and are used in the Regions, shall conform to paragraph (k) of § 52.254 so as to be defined as a non-photochemically reactive solvent.

(d) After July 1975, the composition of the organics in all metal surface coating thinners and reducers that are used in the Regions, shall conform to paragraph (k) of § 52.254 so as to be defined as a non-photochemically reactive solvent.

(e) If there is an inadequate supply of necessary solvent ingredients needed in the manufacture of metal surface coating thinners and reducers for the purpose of meeting the composition requirements of this section in the time constraint required by this section; then evidence of such a supply inadequacy must be presented to the Administrator by the manufacturers of the metal surface coating thinners and reducers, so that the Administrator may grant to the industry an appropriate implementation time extension for meeting the requirements of this section, if and as warranted by the evidence presented.

**§ 52.254 Organic solvent usage.**

(a) This section is applicable in the San Joaquin Valley, Sacramento Valley, and San Francisco Bay Area Intrastate Air Quality Control Regions (the "Regions").

(b) No person shall discharge into the atmosphere more than 15 pounds of organic materials in any 1 day or more than 3 pounds in any 1 hour from any article,

machine, equipment, or other contrivance in which any organic solvent or any material containing organic solvent comes into contact with flame or is baked, heat-cured, or heat-polymerized in the presence of oxygen, unless said discharge has been reduced by at least 85 percent. Those portions of any series of articles, machines, equipment, or other contrivances designed for processing continuous web, strip, or wire that emit organic materials in the course of using operations described in this section shall be collectively subject to compliance with this section.

(c) A person shall not discharge to the atmosphere more than 40 pounds of organic materials in any 1 day or more than 8 pounds in any 1 hour from any article, machine, equipment, or other contrivance used under conditions other than those described in paragraph (b) of this section for employing or applying any photochemically reactive solvent, as defined in paragraph (k) of this section, on material containing such photochemically reactive solvent, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air- or heated-drying of products for the first 12 hours after their removal from any article, machine, or other contrivance described in this section shall be included in determining compliance with this paragraph. Emissions resulting from baking, heat-curing, or heat-polymerizing as described in paragraph (b) of this section, shall be excluded from determination or compliance with this section. Those portions of any series of articles, machines, equipment, or other contrivances designed for processing a continuous web, strip, or wire that emit organic materials in the course of using operations described in this section shall be collectively subject to compliance with this section.

(d) A person shall not, after August 31, 1976, discharge into the atmosphere more than 3,000 pounds of organic materials in any 1 day or more than 450 pounds in any 1 hour from any article, machine, equipment, or other contrivance in which any non-photochemically reactive organic solvent or any material containing such a

solvent or any material containing such a solvent is employed or applied, unless said discharge has been reduced by at least 85 percent. Emissions of organic materials into the atmosphere resulting from air- or heated-drying of products for the first 12 hours after their removal from any article, machine, equipment, or other contrivance described in this section shall be included in determining compliance with this section. Emissions resulting from baking, heat-curing, or heat-polymerizing as described in paragraph (b) of this section shall be excluded from determination of compliance with this section. Those portions of any series of articles, machines, equipment, or other contrivances designed for processing a continuous web, strip, or wire that emit organic materials in the course of using operations described in this section shall be collectively subject to compliance with this section.

(e) Emissions of organic materials to the atmosphere from the cleaning with photochemically reactive solvent, as defined in paragraph (k) of this section, of any article, machine, equipment, or other contrivance described in paragraphs (b), (c), or (d) of this section, shall be included with the other emissions of organic materials for determining compliance with this rule.

(f) Emissions of organic materials into the atmosphere required to be controlled by paragraphs (b), (c), or (d) of this section, shall be reduced by:

(1) Incineration, provided that 90 percent or more of the carbon in the organic material being incinerated is oxidized to carbon dioxide, or

(2) Adsorption, or

(3) Processing in a manner determined by the Administrator to be not less effective than the methods outlined in paragraph (f) (1) or (2) of this section.

(g) A person incinerating, adsorbing, or otherwise processing organic materials pursuant to this section shall provide, properly install and maintain in calibration, in good working order and in operation, devices as specified in the authority to construct or permit to operate, or as specified by the Administrator, for indicat-

ing temperatures, pressures, rates of flow, or other operating conditions necessary to determine the degree and effectiveness of air pollution control.

(h) Any person using organic solvents or any materials containing organic solvents shall supply the Administrator upon request and in the manner and form prescribed by him, written evidence of the chemical composition, physical properties, and amount consumed for each organic solvent used.

(i) The provisions of this section shall not apply to:

(1) The manufacture of organic solvents, or the transport or storage of organic solvents or materials containing organic solvents.

(2) The use of equipment for which other requirements are specified by rules or which are exempted from air pollution control requirements by applicable rules affecting the storage of petroleum products, effluent oil-water separators, and the transfer of gasoline.

(3) The spraying or other employment of insecticides, pesticides, or herbicides.

(4) The employment, application, evaporation, or drying of saturated halogenated hydrocarbons or perchloroethylene.

(5) The use of any material in any article, machine, equipment, or other contrivance described in paragraphs (b), (c), (d), or (e) of this section, if:

(i) The volatile content of such materials consists only of water and organic solids, and

(ii) The organic solvents comprise not more than 20 percent by volume of said volatile content, and

(iii) The volatile content is not photochemically reactive as defined in paragraph (k) of this section, and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame.

This last stipulation applies only for those articles, machines, equipment, or contrivances that are constructed or modified after the effective date of this section.

(6) The use of any material in any article, machine, equipment or other contrivance described in paragraphs (b), (c), (d), or (e) of this section, if:

(i) The organic solvent content of such material does not exceed 30 percent by volume of said material; this to be effective until January 1, 1977. After January 1, 1977, the organic solvent content of such material must not exceed 20 percent by volume of said material.

(ii) The volatile content is not photochemically reactive as defined in paragraph (k) of this section, and

(iii) The organic solvent or any material containing organic solvent does not come into contact with flame. This last stipulation applies only for those articles, machines, equipment, or contrivances that are constructed or modified after the effective date of this section.

(j) For the purposes of this section, organic solvents include diluents, thinners, and reducers and are defined as organic materials that are liquids at standard conditions and are used as dissolvers, viscosity reducers, or cleaning agents, except that such materials exhibiting a boiling point higher than 220° F at 0.5 millimeter mercury absolute pressure or having an equivalent vapor pressure shall not be considered to be solvents unless exposed to temperatures exceeding 220° F.

(k) For the purpose of this section, a photochemically reactive solvent is any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below or which exceeds any of the following individual percentage composition limitations, referred to the total volume of solvent:

(1) A combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation; 5 percent;

(2) A combination of aromatic compounds with 8 or more carbon atoms to the molecule except ethylbenzene, phenyl acetate, and methyl benzoate; 8 percent;

(3) A combination of ethylbenzene, ketones having branched hydrocarbon structures, trichloroethylene or toluene; 20 percent.

Whenever any organic solvent or any constituent of an organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the

most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

(l) For the purpose of this section, organic materials are defined as chemical compounds of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbonates, and ammonium carbonate.

(m) Architectural coatings and their use shall conform to the following requirements, on or before January 1, 1975:

(1) A person shall not sell or offer for sale or use in the areas in which this section applies, in containers of 1-quart capacity or larger, any architectural coating containing photochemically reactive solvent, as defined in paragraph (k) of this section.

(2) A person shall not employ, apply, evaporate, or dry in the areas in which this section applies, any architectural coating purchased in containers of 1-quart capacity or larger containing photochemically reactive solvent, as defined in paragraph (k) of this section.

(3) A person shall not thin or dilute any architectural coating with a photochemically reactive solvent, as defined in paragraph (k) of this section.

(4) For the purpose of this section, an architectural coating is defined as a coating used for residential or commercial buildings and their appurtenances, or for industrial buildings.

(n) A person shall not during any one day dispose of a total of more than 1.5 gallons of any photochemically reactive solvent as defined in paragraph (k) of this section, or of any material containing more than 1.5 gallons of any such photochemically reactive solvent by any means that will permit the evaporation of such solvent into the atmosphere.

(o) Compliance schedule. (1) Except where other final compliance dates are provided in this section, the owner or operator of any stationary source subject to this section shall comply with this section on or before March 31, 1974. In any event:

(i) Any owner or operator in compliance with this section on the effective date of this section shall certify

such compliance to the Administrator no later than 120 days following the effective date of this section.

(ii) Any owner or operator who achieves compliance with this section after the effective date of this section shall certify such compliance to the Administrator within 5 days of the date compliance is achieved.

(p) Any owner or operator of a stationary source subject to paragraph (o) (1) of this section may, not later than 120 days following the effective date of this section, submit to the Administrator for approval a proposed compliance schedule that demonstrates compliance with the provisions in paragraph (o)(1) of this section as expeditiously as practicable but no later than July 31, 1975. The compliance schedule shall provide for increments of progress toward compliance. The dates for achievement of such increments of progress shall be specified. Increments of progress shall include, but not be limited to: Submittal of a final control plan to the Administrator; letting of necessary contracts for construction or process changes or issuance of orders for the purchase of component parts to accomplish emission control or process modification; initiation of onsite construction or installation of emission control equipment or process modification; completion of onsite construction or installation of emission control equipment or process modification and final compliance.

(q) Any owner or operator who submits a compliance schedule pursuant to this section shall, within 5 days after the deadline for each increment of progress, certify to the Administrator whether or not the required increment of the approved compliance schedule has been met.

#### § 52.255 Gasoline transfer vapor control.

(a) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the Metropolitan Los Angeles, Sacramento Valley, and San Joaquin Valley Intrastate Air Quality Control Regions.

(c) No person shall transfer gasoline from any delivery vessel into any stationary storage container with a capacity greater than 250 gallons unless such container

is equipped with a submerged fill pipe and unless the displaced vapors from the storage container are processed by a system that prevents release to the atmosphere of no less than 90 percent by weight of organic compounds in said vapors displaced from the stationary container location.

(1) The vapor recovery portion of the system shall include one or more of the following:

(i) A vapor-tight return line from the storage container to the delivery vessel and a system that will ensure that the vapor return line is connected before gasoline can be transferred into the container.

(ii) Refrigeration-condensation system or equivalent designed to recover no less than 90 percent by weight of the organic compounds in the displaced vapor.

(2) If a "vapor-tight vapor return" system is used to meet the requirements of this section, the system shall be so constructed as to be readily adapted to retrofit with an adsorption system, refrigeration-condensation system, or equivalent vapor removal system, and so constructed as to anticipate compliance with § 52.256.

(3) The vapor-laden delivery vessel shall be subject to the following conditions:

(i) The delivery vessel must be so designed and maintained as to be vapor-tight at all times.

(ii) The vapor-laden delivery vessel may be refilled only at facilities equipped with a vapor recovery system or the equivalent, which can recover at least 90 percent by weight of the organic compounds in the vapors displaced from the delivery vessel during refilling.

(iii) Facilities that do not have more than a 20,000 gallons per day throughput and distribute less than 10 percent of daily volume to delivery vehicles that in turn service storage tanks that do not have a vapor return or balance system, will not be required to have a vapor recovery system in operation before January 1, 1977. Facilities that exclusively service delivery vehicles that in turn service storage tanks that do not have a required vapor return or balance system, will not be required to have a vapor recovery system.

(iv) Gasoline storage compartments of 1,000 gallons or less in gasoline delivery vehicles presently in use on the promulgation date of this regulation will not be required to be retrofitted with a vapor return system until January 1, 1977.

(d) The provisions of paragraph (c) of this section shall not apply to the following:

(1) Stationary containers having a capacity less than 550 gallons used exclusively for the fueling of implements of husbandry.

(2) Any container having a capacity less than 2,000 gallons installed prior to promulgation of this section.

(3) Transfer made to storage tanks equipped with floating roofs or their equivalent.

(e) Compliance schedules:

(1) February 1, 1974—Submit to the Administrator a final control plan, which describes at a minimum the steps that will be taken by the source to achieve compliance with the provisions of paragraph (c) of this section.

(2) May 1, 1974—Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.

(3) January 1, 1975—Initiate on-site construction or installation of emission control equipment.

(4) February 1, 1976—Complete on-site construction or installation of emission control equipment.

(5) March 1, 1976—Assure final compliance with the provisions of paragraph (c) of this section.

(6) Any owner or operator of sources subject to the compliance schedule in this paragraph shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(f) Paragraph (e) of this section shall not apply:

(1) To a source which is presently in compliance with the provisions of paragraph (c) of this section and which has certified such compliance to the Administrator by

December 15, 1973. The Administrator may request whatever supporting information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by December 15, 1973, a proposed alternative schedule. No such schedule may provide for compliance after March 1, 1976. If promulgated by the Administrator, such schedule shall satisfy the requirements of this section for the affected source.

(g) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (e) of this section fails to satisfy the requirements of § 51.15 (b) and (c) of this chapter.

(h) Any gasoline-dispensing facility subject to this section that installs a storage tank after the effective date of this section shall comply with the requirements of paragraph (c) of this section by March 1, 1976 and prior to that date shall comply with paragraph (e) of this section as far as possible. Any facility subject to this section that installs a storage tank after March 1, 1976, shall comply with the requirements of paragraph (c) of this section at the time of installation.

**§ 52.256 Control of evaporative losses from the filling of vehicular tanks.**

(a) "Gasoline" means any petroleum distillate having a Reid vapor pressure of 4 pounds or greater.

(b) This section is applicable in the Metropolitan Los Angeles, Sacramento Valley, and San Joaquin Valley Intrapstate Air Quality Control Regions.

(c) A person shall not transfer gasoline to an automotive fuel tank from a gasoline dispensing system unless the transfer is made through a fill nozzle designed to:

(1) Prevent discharge of hydrocarbon vapors to the atmosphere from either the vehicle filler neck or dispensing nozzle;

(2) Direct vapor displaced from the automotive fuel tank to a system wherein at least 90 percent by weight of the organic compounds in displaced vapors are recovered; and

(3) Prevent automotive fuel tank overfills or spillage on fill nozzle disconnect.

(d) The system referred to in paragraph (c) of this section can consist of a vapor-tight vapor return line from the fill nozzle/filler neck interface to the dispensing tank or to an adsorption, absorption, incineration, refrigeration-condensation system or its equivalent.

(e) Components of the systems required by paragraph (c) of § 52.255 can be used for compliance with paragraph (c) of this section.

(f) If it is demonstrated to the satisfaction of the Administrator that it is impractical to comply with the provisions of paragraph (c) of this section as a result of vehicle fill neck configuration, location, or other design features for a class of vehicles, the provisions of this paragraph shall not apply to such vehicles. However, in no case shall such configuration exempt any gasoline dispensing facility from installing and using in the most effective manner a system required by paragraph (c) of this section.

(g) Compliance schedule:

(1) February 1, 1974—Submit to the Administrator a final control plan, which describes at a minimum the steps that will be taken by the source to achieve compliance with the provisions of paragraph (c) of this section.

(2) June 1, 1974—Negotiate and sign all necessary contracts for emission control systems, or issue orders for the purchase of component parts to accomplish emission control.

(3) January 1, 1975—Initiate on-site construction or installation of emission control equipment. Compliance with the requirements of paragraph (c) of this section shall be as soon as practicable, but no later than specified in paragraph (g) (4) and (5) of this section.

(4) May 1, 1977—Complete on-site construction or installation of emission control equipment or process modification.

(5) May 31, 1977—Assure final compliance with the provisions of paragraph (c) of this section.

(6) Any owner or operator of sources subject to the compliance schedule in this paragraph (g) shall certify to the Administrator, within 5 days after the deadline for each increment of progress, whether or not the required increment of progress has been met.

(h) Paragraph (g) of this section shall not apply:

(1) To a source which is presently in compliance with the provisions of paragraph (c) of this section and which has certified such compliance to the Administrator by December 15, 1973. The Administrator may request whatever supporting information he considers necessary for proper certification.

(2) To a source for which a compliance schedule is adopted by the State and approved by the Administrator.

(3) To a source whose owner or operator submits to the Administrator, by December 15, 1973, a proposed alternative schedule. No such schedule may provide for compliance after May 31, 1977. If promulgated by the Administrator, such schedule shall satisfy the requirements of this section for the affected source.

(i) Nothing in this section shall preclude the Administrator from promulgating a separate schedule for any source to which the application of the compliance schedule in paragraph (g) of this section fails to satisfy the requirements of § 51.15(b) and (c) of this chapter.

(j) Any gasoline dispensing facility subject to this section that installs a gasoline dispensing system after the effective date of this section shall comply with the requirements of paragraphs (c) of this section by May 31, 1977, and prior to that date shall comply with paragraph (g) of this section as far as possible. Any facility subject to this section that installs a gasoline dispensing system after May 31, 1977, shall comply with the requirements of paragraph (c) of this section at the time of installation.

**§ 52.257 Computer carpool matching.**

(a) "Carpool matching" means assembling lists of commuters with similar daily travel patterns and providing a mechanism by which persons on such lists may be put in contact with each other for the purpose of forming carpools.

(b) This section is applicable in the Metropolitan Los Angeles, San Francisco Bay Area, and San Diego Air Quality Control Regions; in the Fresno, San Joaquin, Stanislaus, and Kern counties of the San Joaquin Air Quality Control Region; and in the Sacramento, Placer, Yolo, and El Dorado counties of the Sacramento Valley Intrastate Air Quality Control Region (the "Regions").

(c) The State of California shall, unless exempted by the Administrator on the basis of a finding that equivalent service is being or will be provided by some other public or private entity, establish on or before January 1, 1975, a computer-aided carpool matching system that is conveniently available to the general public and to all employees of businesses within the Regions having more than 100 employees who operate light-duty vehicles on streets and highways over which the State of California has ownership or control. In the Los Angeles Region, however, the system need only, by January 1, 1975, cover employees in Los Angeles County and other cities in the Region having populations greater than 50,000, but it must be expanded to its full required scope by May 31, 1975.

(d) No later than July 1, 1974, the State of California shall furnish the Administrator with separate compliance schedules (including any necessary draft or adopted regulations) for implementing the requirements of paragraph (c) of this section in each of the Regions. The compliance schedule shall include:

(1) A method of collecting information that will include the following as a minimum:

(i) Provisions for each affected employee to receive an application form with a cover letter describing the matching program;

(ii) Provision on each application for applicant identification of time, origin, and destination, and the applicant's desire to ride only, drive only, or share driving;

(iii) A computer method of matching information that will have provisions for locating each applicant's origin and destination within the relevant Region, matching applicants with similar origins and destinations and travel schedules, and enabling the persons so matched to make contact with each other at the request of any one of them;

(iv) A method of providing continuing service such that the matched lists of all applicants are retained and made available for use by new applicants, application forms are currently available, and the master lists are periodically updated to remove applicants who no longer meet the governing criteria and add new applicants who do;

(v) An agency or agencies responsible for operating, overseeing, and maintaining the computer carpool matching system.

(e) No later than September 30, 1974, the State of California shall submit to the Administrator validly adopted regulations establishing the program outlined in each such compliance schedule.

(f) The State of California shall, in conjunction with the employers listed below, establish pilot programs for each region specified to assist it in developing the full-scale carpooling systems required by paragraph (c) of this section:

(1) In the San Diego Region—U.S. Navy Underwater Systems Center and the U.S. Navy Electronics Laboratory.

(2) In the San Francisco Region—U.S. Naval Base at Treasure Island, Alameda U.S. Naval Air Station, Presidio of the U.S. Army, and U.S. Naval Air Station at Moffet Field.

(3) In the Sacramento Valley Region—the McClellan Air Force Base, Sacramento.

(4) In the San Joaquin Valley Region—the Internal Revenue Service, Butler and Willow Avenues, Fresno.

(5) In the Los Angeles Region—the State shall cooperate with the City of Los Angeles to establish a pilot program for all employees in the Los Angeles central business district.

(g) The pilot programs listed in paragraph (f) of this section shall be implemented on the following schedule:

(1) On or before December 31, 1973, each employer or other entity subject to obligations under paragraph (f) of this section shall, together with the State of California, submit to the Administrator a compliance schedule conforming to the substantive requirements of paragraph (d)(1) of this section.

(2) No later than March 31, 1974, the pilot program shall begin operation.

#### § 52.258 Mass transit priority—excluding bus use.

(a) This regulation is applicable in the San Diego Intrastate Air Quality Control Region.

(b) On or before October 30, 1974, the City of San Diego shall convert all lanes of Broadway, from Kettner Boulevard to 14th Street, in the City of San Diego, to the exclusive use of buses.

(c) On or before March 31, 1974, the City of San Diego shall submit to the Administrator a detailed compliance schedule showing the steps it will take to convert Broadway to the exclusive use of buses. The compliance schedule shall specify measures to prevent the use of Broadway by non-buses and shall provide for the establishment of a synchronized signal system to maintain traffic speed.

(d) No later than June 1, 1975, the City of San Diego shall submit to the Administrator a detailed compliance schedule in the form specified in paragraph (c) of this section for the conversion to the exclusive use of buses of a significant additional number of miles of street (based on studies available to the Administrator) unless other measures deemed equivalent by the Administrator are submitted. No later than January 31, 1976,

the City of San Diego shall put the program so outlined into effect.

(e) On or before October 30, 1974, the State of California shall begin to provide preferential traffic treatment for buses operating between the eastern terminus of the Broadway exclusive bus route established under paragraph (c) of this section and the entrances to State Highway 163.

(f) On or before March 31, 1974, the State of California shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish the required system of preferential treatment. This schedule may provide for the conversion of selected streets to the exclusive bus route established under paragraph (c) of this section and the entrances to State Highway 163.

(f) On or before March 31, 1974, the State of California shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish the required system of preferential treatment. This schedule may provide for the conversion of selected streets to the exclusive use of such buses, for the establishment of bus lanes, for metering of all other traffic using streets set aside for priority use by buses, or for any other such system acceptable to the Administrator.

#### § 52.259 Ramp metering and preferential bus/carpool lanes.

(a) "Carpool" means a vehicle containing three or more persons.

(b) This regulation is applicable in the San Diego Intrastate Air Quality Control Region.

(c) On or before June 30, 1974, the State of California shall institute a program to grant preferential treatment to buses and carpools using the following sections of road:

(1) California State Highway 125 from Interstate 8 to the junction with California State Highway 94; and

(2) California State Highway 94 from the junction with California State Highway 125 to the junction with Interstate Freeway 5.

(d) On or before December 31, 1973, the State of California shall submit to the Administrator a detailed compliance schedule detailing the steps it will take to establish the preferential treatment system. The program shall include:

(1) A system of ramp metering designed to prevent the entrance of vehicles other than buses and carpools onto the designated road segments at any time when their entrance would have the effect of reducing the average speed at which buses and carpools travel. Such metering shall be established on each access ramp serving the designated highway segments provided that any given ramp may be exempted from this requirement if the State of California makes a showing satisfactory to the Administrator that the effect on average bus and carpool speed of installing such metering would be insubstantial.

(2) A system of bypass lanes designed to allow buses and carpools to avoid congestion or restrictions caused by the metering system described in paragraph (d)(1) of this section.

(3) A system of enforcement containing appropriate penalties for other vehicles to ensure that the bypass lanes are used only by buses and carpools.

(e) No later than September 30, 1975, the State of California shall implement a further system of preferential treatment for buses and carpools. Unless other measures deemed equivalent by the Administrator are submitted, this program shall at a minimum provide for the significant expansion based on studies to be designated by the Administrator of both the bus/carpool lane and the ramp metering systems.

(f) No later than March 30, 1975, the State of California shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish the preferential treatment system required under paragraph (e) of this section.

**§ 52.260 Organic solvent usage. (Federal regulation adding to and replacing parts of Rule 66 of San Diego County)**

(a) This section is applicable in that portion of San Diego County contained within the San Diego Intrastate Air Quality Control Region. This section is effective as of January 1, 1975.

(b) Rule 66 of San Diego County as contained in the local air pollution control district regulations for the San Diego County is hereby incorporated by reference in this plan and is amended by replacing subparagraph (1)(5), and adding in place thereof subparagraphs (5), (6), and (7). The amendment is as follows:

(5) The use of any material, in any article, machine, equipment, or other contrivance described in sections (a), (b), (c), or (e), if:

(i) The volatile content of such material consists only of water and organic solvents, and

(ii) The organic solvents comprise not more than 20 percent of volume of said bulk content, and

(iii) The volatile content is not photochemically reactive as defined in section (n), and

(iv) The organic solvent or any material containing organic solvent does not come into contact with flame. This requirement is to be effective only for those articles, machines, equipment or contrivances covered by this regulation, and that are constructed or modified after the effective date of this regulation.

(6) The use of any material in any article, machine, equipment, or other contrivance described in sections (a), (b), (c), or (e) if:

(i) The organic solvent content of such material does not exceed 30 percent by volume of said material: This is to be effective until January 1, 1977. After such date the organic solvent content of such material must not exceed 20 percent by volume.

(ii) The volatile content is not photochemically reactive as defined in section (n), and

(iii) The organic solvent or any material containing organic solvent does not come into contact with flame. This requirement is to be effective only for those articles, machines, equipment, or contrivances that are constructed or modified after the effective date of this regulation.

(7) A person shall not during any one day dispose of a total of more than 1.5 gallons of any photochemically reactive solvent, as defined in paragraph (n) of this rule, or of any such photochemically reactive solvent, by any means that will permit the evaporation of such solvent into the atmosphere.

**§ 52.261 Preferential bus/carpool lanes, San Francisco Bay Area.**

(a) Definitions:

(1) "Bus/carpool lane" means a lane on a street or highway open only to buses (or buses and carpools), whether constructed especially for that purpose or converted from existing lanes.

(2) "Carpool" means a vehicle containing three or more persons.

(b) This regulation is applicable in the San Francisco Bay Area Intrastate Air Quality Control Region (the "Region").

(c) On or before May 1, 1974, the State of California, through the State Department of Transportation or through other agencies to which legal responsibility may have been delegated, shall establish upon at least three major highways having three or more lanes running in each direction, a system of bus/carpool lanes totalling not less than 45 miles running each morning and evening during the hours specified in paragraph (d)(5) of this section in the direction of maximum traffic flow.

(d) On or before December 31, 1973, the State of California shall submit to the Administrator a detailed compliance schedule showing the steps it will take to establish the system of bus/carpool lanes required by paragraph (c) of this section, with each schedule to include the following:

(1) Each street or highway that will have bus/carpool lanes must be identified with a schedule for the establishment of the lanes.

(2) Bus/carpool lanes must be prominently indicated by overhead signs at appropriate intervals and at each intersection of entry ramps.

(3) Bus/carpool lanes must be prominently indicated by distinctive painted, pylon, or physical barriers.

(4) Vehicles legally using the bus/carpool lanes shall have the right of way when crossing other portions of the road to enter or leave such lanes.

(5) The bus/carpool lanes required hereunder may be either concurrent flow or contraflow and, at a minimum, shall operate from 6:30 a.m. to 9:30 a.m. and from 3:30 p.m. to 6:30 p.m. each weekday.

(e) On or before May 31, 1975, the State of California shall implement a further bus/carpool lane program under which the total mileage of bus/carpool lanes required by paragraph (c) of this section shall, at a minimum, be doubled. On or before December 31, 1974, the State of California shall submit to the Administrator a detailed compliance schedule in the form specified by paragraph (d) of this section, indicating the measures it will take to establish this further program.

**§ 52.262 Submittal of studies—San Francisco Bay Area.**

(a) The State of California shall submit to the Administrator by December 31, 1973, a status report on all "corridor issues" presented in the San Francisco Metropolitan Transportation Commission Report of June 27, 1973. This status report shall include, but not necessarily be limited to:

(1) A complete description of the particular corridor issue study.

(2) The date of completion of the study.

(3) The total person-hours necessary for the study.

(4) The relevance of the study to automotive emission reductions.

(5) The status of the study as of December 31, 1973.

(6) The Administrator will evaluate this status report and determine if greater Federal participation is required for either resolution of the study conclusions or implementation of the study's recommendations.

**§ 52.263 Priority treatment for buses and carpools—Los Angeles Region.**

(a) Definitions:

(1) "Carpool" means a vehicle containing three or more persons.

(2) "Bus/carpool lane" means a lane on a street or highway open only to buses (or to buses and carpools), whether constructed especially for that purpose or converted from existing lanes.

(3) "Preferential treatment" for any class of vehicles, means either the setting aside of one traffic lane for the exclusive use of such vehicles or other measures (for example, access metering or setting aside the entire street), which the Administrator finds would be at least equal in VMT reduction effect to the establishment of such a lane.

(b) This regulation is applicable in the Metropolitan Los Angeles Intrastate Air Quality Control Region (the "Region").

(c) On or before May 31, 1974, the State of California, through the State Department of Transportation or through other agencies to which legal authority has been delegated, shall establish the following system of bus/carpool lanes.

(1) Ventura/Hollywood Corridor—a concurrent flow exclusive bus/carpool lane from Topanga Canyon Boulevard, Woodland Hills (U.S. 101) to junction of the Hollywood Freeway, and contraflow on the Hollywood Freeway (U.S. 101) from the junction with Ventura Freeway in North Hollywood to Vermont Avenue, and bus preferential treatment on arterial surface streets from

Vermont Avenue to the Los Angeles central business district (CBD).

(2) Harbor Freeway Corridor—contraflow on Harbor Freeway (California 11) from vicinity of Pacific Coast Highway, in Wilmington, to junction of Santa Monica Freeway (I-10), then by surface street preferential treatment to LA/CBD.

(3) Wilshire Corridor—surface street preferential bus treatment from vicinity of San Vincente Boulevard, to LA/CBD.

(4) San Bernardino Freeway Corridor—Bus/carpool lane, either contraflow or concurrent flow on San Bernardino Freeway from El Monte terminus of existing San Bernardino Freeway bus lane (I-10), to vicinity of Ontario Airport.

(5) Priority Treatment in CBD—provide preferential treatment in CBD on surface streets to connect Wilshire and San Bernardino corridors.

(d) On or before May 31, 1976, the State of California, through the State Department of Transportation or other agencies to which legal authority has been delegated, shall establish the following system of bus and bus/carpool lanes:

(1) Contraflow lane on the Golden State Freeway (I-5) from junction of Ventura Freeway (California 134) in Los Angeles to San Bernardino Freeway (I-10).

(2) Contraflow on Pasadena Freeway (California 11) from terminus in City of Pasadena to Hollywood Freeway (U.S. 101).

(3) Contraflow on Pomona Freeway from San Gabriel Freeway (I-605) to Santa Ana Freeway (I-5).

(4) Concurrent flow in San Diego Freeway (I-405) from Ventura Freeway (U.S. 101) in Sherman Oaks to Newport Freeway (California 55), Costa Mesa.

(5) Concurrent flow on Long Beach Freeway (California 7) from Santa Ana Freeway (I-5), City of Commerce to San Diego Freeway (I-405), Long Beach.

(6) Artesia Freeway (California 91) from Santa Ana Freeway (I-5) to Long Beach Freeway (California 7), Long Beach.

(e) Stage III will include specific routes in other portions of the Region.

(f) On or before December 31, 1973, the State of California shall submit to the Administrator a compliance schedule showing the steps it will take to establish the system of bus/carpool lanes required by paragraphs (c) and (d) of this section, with each schedule to include the following:

(1) A schedule for the establishment of the lanes. The schedule for the lanes required by paragraph (d) of this section shall provide for the first such lane to be set aside no later than June 1, 1974.

(2) Bus/carpool lanes must be prominently indicated by overhead signs at appropriate intervals and at each intersection of entry ramps.

(3) Bus/carpool lanes must be prominently indicated by distinctive painted, pylon, or physical barriers.

(4) Vehicles using a bus/carpool lane shall have the right of way when crossing other portions of the road to enter or leave such lanes.

(5) At a minimum, the bus/carpool lanes so set aside shall operate from 6:30 a.m. to 9:30 a.m. and from 3:30 to 6:30 p.m. each weekday.

(g) No deviation from the system of bus/carpool lanes required under paragraphs (c) and (d) of this section shall be permitted except upon application made by the State of California to the Administrator at the time of submittal of compliance schedules and approved by him, which application must contain a satisfactory designation of alternate routes for the establishment of such lanes.

#### § 52.264 Mass transit priority strategy and planning.

(a) In this section and § 52.265, "Mass transit priority" means any preferential treatment that is given to mass transit operations and carpool versus the private single passenger automobile, in terms of access, rights-of-way, or any other appropriate measures.

(b) This section is applicable in the four county area of El Dorado, Placer, Sacramento, and Yolo contained in the Sacramento Valley Intrastate Air Quality Control Region.

(c) A study to determine the method or methods suitable for providing mass transit bus operation priority treatment on or in the vicinity of "J" Street in the City of Sacramento, shall be conducted by the State of California or a designated local or regional transportation authority. In addition to or as an adjunct to, the "J" Street study, the State of California or a designated local or regional transportation authority, shall investigate the present and near-term future (i.e. 1975 to 1977) need for priority treatment of mass transit buses in freeway and major thoroughfare operations in the four county area.

(1) The "J" Street portion of this study shall be completed and submitted to the administrator by March 31, 1974, shall outline a suitable transit priority strategy and shall present in detail the implementation timetables and obstacles associated with the strategy, so that the Administrator can review implementation progress. No later than September 30, 1974, the "J" Street mass transit priority strategy must be implemented.

(2) The "freeway and major thoroughfare" portion of the study shall be completed by March 31, 1974. Estimated implementation timetables and obstacles associated with likely strategies shall be outlined so that the Administrator can review and determine the need [for] and progress of implementation.

(3) With regard to both the "J Street" and the "freeway and major thoroughfare" sections of the study, general guidelines and criteria shall be established for determining the need for or appropriateness of providing mass transit priority in freeway, major thoroughfare, and local street operations, and a system of review for determining the need for implementing mass transit priority strategies shall be presented.

#### § 52.265 Mass transit and transit priority planning.

(a) This section is applicable in the Standard Metropolitan Statistical Areas (SMSA's) of the cities of Fresno, Stockton, Bakersfield, and Modesto in the San Joaquin Valley Intrastate Air Quality Control Region.

(b) A study being sponsored by the State of California Department of Transportation is presently in progress and is scheduled for completion in January of 1974. This study will indicate the potential for public transit usage in the Fresno City area. Using this study and other appropriate information as a guide, the State of California or a designated local or regional transportation authority shall, by May 31, 1974, submit to the Administrator recommended mass transit strategies, including mass transit priority strategies, that are potentially useful and feasible in the time frame of the present to 1975 and 1977. The recommendation shall present in detail the implementation milestone timetables and the obstacles associated with the strategies so that the Administrator can review and determine the need for and progress of implementation.

(c) Studies shall be conducted in the Stockton, Bakersfield, and Modesto SMSA's by the State of California or by designated local or regional transportation authorities. These studies shall be completed and submitted to the Administrator by September 30, 1974, and shall recommend mass transit strategies, including mass transit priority strategies, that are potentially useful and feasi-

ble in the time frame of the present to 1975 and 1977. The recommendation shall present in detail the implementation timetables and obstacles associated with the strategies, so that the Administrator can review all available information and determine the need for and progress of implementation.

#### § 52.266 Monitoring transportation mode trends.

(a) This section is applicable to the San Francisco Bay Area, Los Angeles, San Diego, San Joaquin Valley, and Sacramento Intrastate Air Quality Control Regions.

(b) The State of California or a designated agency approved by the Administrator shall monitor the actual per vehicle emissions reductions occurring as a result of the retrofit devices and inspection and maintenance programs required under §§ 52.242, 52.244, and 52.245, and the observed changes in vehicle miles traveled and average vehicle speeds as a result of traffic flow changes and reductions in vehicle use required under §§ 52.241 (if implemented), 52.243 (if implemented), 52.248, 52.249, 52.250, 52.251, 52.257, 52.258, 52.259, 52.261, 52.263, 52.264, and 52.265.

(c) No later than March 1, 1974, the State shall submit to the Administrator a detailed program demonstrating compliance with paragraph (b) of this section and in accordance with § 51.19(d) of this chapter. The program description shall include the following:

(1) The agency or agencies responsible for conducting, overseeing, and maintaining the monitoring program.

(2) The administrative process to be used.

(3) A description of the methods to be used to collect the emission reduction/VMT reduction/vehicle speed data, including a description of any modeling techniques to be employed.

(4) The funding requirements, including a signed statement from the Governor or State Treasurer or their

respective designees identifying the source and amount of funds for the program.

(d) All data obtained by the monitoring program shall be included in the quarterly report submitted to the Administrator by the State, as required by § 51.7 of this chapter, in the format prescribed in Appendix M to part 51 of this chapter. The first quarterly report shall cover the period January 1-March 31, 1975.

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